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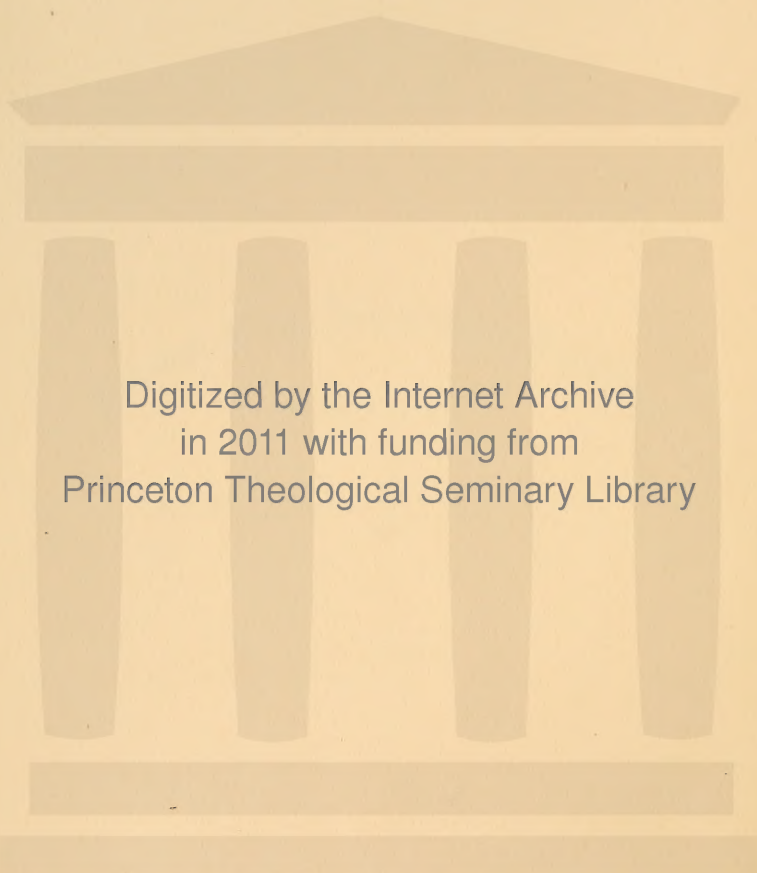
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INTUITIVE PERCEPTION

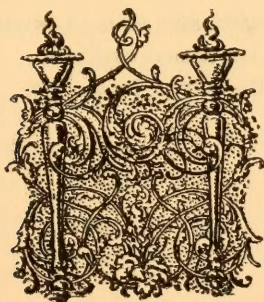
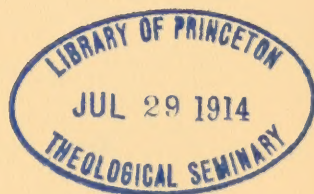
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A NEW PHILOSOPHY OF NATURAL REALISM

IN ACCORD WITH UNIVERSALLY ACCEPTED
TRUTHS

BY

WILLIAM HENRY HODGE



"No attempt to show that the data of Consciousness are either in themselves, or in their necessary consequences, mutually contradictory has yet succeeded."—*Sir William Hamilton.*

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TO
MY ESTEEMED UNCLE,
CHARLES HODGE, D. D., LL. D.
UNSEEN YET STILL IN THOUGHT A LIVING PRESENCE,
Preminent in **P**hilosophy as in **T**heology,
WHOSE INSTRUCTION AND PERSONAL INFLUENCE IT WAS MY PRIVILEGE
TO ENJOY FOR FOUR SUCCESSIVE YEARS,
AS A STUDENT IN THE SEMINARY,
AND AS A SON WITHIN THE SACRED PRECINCTS OF HIS
Home and **S**tudy,
AND TO WHOM MORE THAN TO ANY OTHER ARE DUE THE AWAKENING
AND DIRECTING OF MY OWN PHILOSOPHIC THOUGHT,
THIS BOOK IS AFFECTIONATELY DEDICATED
WITH THE TRUST THAT IT MAY BE A FURTHER MESSAGE OF
God's **T**ruth to the **W**orld.

Chestnut Hill
Pa

PREFACE

By Intuitive Perception we behold Realities. The Philosophy which maintains and unfolds this, has been called "Natural Realism."

But it is evident that the way, in which it has been hitherto presented, is characterized by numerous inconsistencies, and is unsatisfactory, and that there is need of a restatement of the Doctrine, that it may be free from inherent weakness, which exposes it to attacks by which it may be overthrown.

The Substance, given in this Book, is that which I have received from the eminent men, with whose teachings I have become familiar, which has been assimilated and wrought upon within my own mind, and which fashioned anew, interwoven with personal observations, made through a course of many years, is now given forth in forms, which seem to me to be the real Truth, freed from the errors and weakness, which have hitherto prevailed.

Though few quotations have been made, it is fully acknowledged that the Exposition of Intuitive Perception and Natural Realism, which is given, could never have been written, but for the thought and work and the gathered and garnered material of those who have labored in the varied fields of Philosophic and Scientific inquiry.

The Book may be designated as a New Contribution to the unfolding and establishment of Familiar Truths; a Philosophy of Intuitive Perception and Natural Realism, so fashioned and expressed, that all may understand it, and blended harmoniously with the Testimony of Consciousness, as interpreted by all men.

Natural Realism, properly presented, is Truth unasailable; it has the Infallibility of Infallible Consciousness, so far as it is a true exposition of its Testimony.

It has, at least, been my aim and effort to give such presentation, and my trust is that the evident intent of the language and expressions employed be accepted, and not a meaning which may possibly be attributed to them, but which I neither hold nor teach.

WILLIAM H. HODGE.

Chestnut Hill, Philadelphia, Pa., May, 1903.

INTRODUCTORY THOUGHT

Faith in the Contradictory

Nothing can be true that is contrary to Reason itself in the abstract.

But on proper testimony men do, should and must believe much that is to *them* contradictory. It is in this way that a large part of Scientific and Religious Truth is generally accepted.

This is the part of true Wisdom; that which we do not understand ourselves we receive from those who do understand it; that which is contradictory to us, we receive from those to whom it is not contradictory, who see its self-consistency and its harmony with other truths.

It is a hard lesson for men to learn, that Reason is a most incompetent guide. He who depends upon his own reasoning, and upon it alone, must necessarily wander far away from vast realms of soul-inspiring, life-giving Truth; he who rejects all that is contradictory to his reason lives in his own narrow-minded world apart from all that is beyond and higher, at fault in regard to and ignorant of the unexplained wonders of Nature and of the Soul, and the greater mysteries of Divine Revelation.

CONTENTS

| | PAGE |
|----------------------------|------|
| PREFACE..... | v |
| INTRODUCTORY THOUGHT | vi |

CHAPTER I

CONSCIOUSNESS

| | |
|--|------|
| Absolutely Trustworthy, One Power, Why Infallible, Intuition, No Intuitive Belief, No Intuitive Judgments, Immediate Cognition, Examples of Error, Definite Thought Needed | 1-20 |
|--|------|

CHAPTER II

OUR ORIGIN

| | |
|--|-------|
| SECS. 1. Testimony of Consciousness, 2. Testimony of Divine Revelation, 3. Scientific Explanation, Evolution at Fault, New Theory..... | 21-74 |
|--|-------|

CHAPTER III

WHAT ARE WE?

| | |
|---|--------|
| SECS. 1. "I Am," 2. Personal Identity, 3. Double Personality—Sub-Consciousness, 4. Immortality, 5. Time, Attribute of Being, <i>i. e.</i> , Concrete Being, 6. Space, Attribute of Material Things, 7. Relation of the Soul to Space, 8. What is Man .. | 75-174 |
|---|--------|

CHAPTER IV

SENSATION

| | |
|--|---------|
| SECS. 1. Bodily Feeling, 2. Localizing of Sensations, Color, Sound, Objective Realities, 3. Primary and Secondary Qualities, 4. Physiology | 148-183 |
|--|---------|

CHAPTER V

EXTERNAL PERCEPTION

| | |
|--|---------|
| SECS. 1. Realities Cognized, 2. Organs of Perception, 3. The Eye, 4. The Other Organs, 5. True Natural Realism ... | 184-293 |
|--|---------|

CHAPTER VI

INTERNAL PERCEPTION

| | |
|--|---------|
| SECS. 1. Spiritual Realities, 2. Scientific Perception, 3. Beliefs and Judgments | 294-305 |
|--|---------|

| | PAGE |
|---|---------|
| CHAPTER VII | |
| INTUITIONS | |
| SECS. 1. Classification, 2. Being, 3. Substance, 4. Reality, 5. The Infinite Absolute, 6. The Intuition of God, 7. Life, 8. Person, 9. Power, 10. Motion, 11. Time and Eternity (See Ch. iii, Sec. 5), 12. Space and Infinitude (See Ch. iii, Sec. 6), 13. The Essential Distinction Between the Spiritual and Material | 306-380 |
| CHAPTER VIII | |
| NECESSARY TRUTHS | |
| SECS. 1. Non-Contradiction, 2. Numbers, 3. Geometry, 4. Cause and Effect, 5. Right and Wrong, Moral Obligation, 6. Religion | 381-426 |
| CHAPTER IX | |
| A NEW EXPOSITION OF THE WILL | |
| A Ceaselessly Energizing Force, The Executive Power of the Soul | 427-470 |
| CHAPTER X | |
| CONCLUSION | |
| Truth Unassailable | 471-472 |

Intuitive Perception

CHAPTER I

Consciousness

THIS is the origin and foundation of our knowledge.

Its declarations, or testimony is *Absolutely Trustworthy*. If we deny its affirmations nothing is left, if we doubt some, all are doubtful.

This is universally acknowledged; by common people, scientists, philosophers. Common people believe implicitly what they see and hear and feel for themselves; the testimony of two or three witnesses, agreeing with one another and stating what they have themselves seen, heard and felt, is regarded as conclusive.

Scientists build their sciences upon their own observation with perfect confidence, while philosophers take pains to point out that Consciousness always affirms the exact truth, and they make it the foundation of their systems and their ultimate appeal.

The same thing appears in the Scriptures. The Apostles claimed to be trustworthy because they were eye-witnesses; that which they had heard and seen and handled they declared unto men.

Consciousness may be said to be our taking knowledge of something. Sometimes a man is said to be *unconscious*, that is he does not notice, he does not observe, he is ignorant, he does not know. While in such a state, it matters not what may be his surroundings, what persons may be near him, what may be taking place, what injuries may be inflicted upon him, he simply takes no

knowledge of them all; he comes to consciousness as he begins to observe, to notice, to know.

A state or condition of Consciousness is that in which we are observing and taking knowledge of ourselves and our surroundings, that is of ourselves and of all our mental or spiritual operations and experiences, and also of our bodies and all that which surrounds us in the world, so far as they come within the range of our observation; and to be conscious of any individual thing is to know, or take knowledge of it. Considered as a power or attribute of the soul, it is the power with which we have been endowed of knowing, or taking knowledge of the things of self and of the world. It is the attribute of Cognition, or the power to cognize things.

This power or attribute of the soul is always indivisibly *One* and the *Same*, whatever be the character of its activity or the nature of the object towards which it is directed; the only distinctions are those which are found in the objects themselves. We have the one power of visual perception, no matter how or upon what we employ it. It remains the same, whether we look through the unaided eye or through the telescope or microscope—whether we look into and through the deep blue of the far-off sky, whose depths we cannot fathom, or upon the flat solid spot of ground whereon we stand—whether we look upon stars and nebulae upon the utmost limits of the created universe, endeavoring to penetrate regions where even the imagination at its utmost stretch falters and fails, or upon a grain of sand almost invisible close at our hand—whether we contemplate the great beasts of the earth in forest and field, or observe the strange living creatures moving in a drop of water beneath the lens of the microscope—whether with wondering admiration and all-absorbing interest we watch “the human face divine,” endeavoring to read the thoughts and emotions of the soul within, revealing themselves through the expression

of the eye and the play of the ever-changing features, or cast a glance on a piece of stone, which the foot happens to strike as we walk.

Varied as are all these things upon which we look, we see them all alike by the one and the same power of visual perception; we take knowledge of them, we cognize them, we are conscious of them. This one indivisible power of visual perception is one and the same with consciousness, the soul's attribute of knowing or cognizing things, which is as indivisible as is the power of visual perception. This latter is simply our indivisible power of consciousness directed towards, and engaged with those aspects, traits, or properties of the external, material world, which are revealed through light. It is this self-same power which makes known to us those aspects, traits, or properties of matter which are revealed by sound, flavor, perfume and resistance, or touch. However varied these are from one another and from light, they no more imply or prove different mental powers of perception or cognition than do the varied objects of sight imply different powers of visual perception. In this, and in all the cases mentioned, we take knowledge of the varied aspects of the material world by the one indivisible power of Consciousness. By it we cognize all that is revealed by light, sound, flavor, perfume, resistance or touch; these differ from one another, being different aspects or properties of the material world; the difference is in them, not at all in the one power by which they are cognized. If there be other properties of matter of which we are ignorant; in order that we might know them, there would be need not of new mental endowment, but only that they be presented before the mind by new bodily organs or by some instruments, such as the microscope, etc.

Mention should be made of this, because in the language which is often used there seems to be an implica-

tion that there are different kinds of Consciousness, such as sight, hearing, smell, taste and touch; and also to call attention to the fact that the one indivisible consciousness, by which we take knowledge of all the diversified objects of the external material world, is the same power precisely by which we take knowledge of the activities and experiences of the inner world of self, or spirit, and of all primary, fundamental, or axiomatic principles or truths. This is often called Self-Consciousness, with the more or less definite suggestion that it is in itself in some way different from our consciousness of the things of the external material world; or at least in the use of this name there is often the neglect of emphasizing the fact that our Consciousness is one indivisible power, and that by this one selfsame power we look, on the one hand, on the inner world of self, and, on the other, on the external world of matter; the only difference being in the objects towards which consciousness directs its attention; just as in visual perception, the power of seeing remains the same, however varied or contradictory the objects seen may be. Figuratively speaking, Consciousness may be called the eye of the soul by which it sees, knows the things of the inner and outer world which are present to it.

With this understanding of Consciousness, it is evident *why* it is *infallible*, and is always relied upon as perfectly trustworthy. It is *because* it is the seeing and knowing the things themselves.

The explanation of the infallibility of Consciousness, and of the necessary and universal trust placed in it, which is often given, is largely unsatisfactory. A great deal of mystery is often thrown over it which is not at all necessary.

We do not deny that we are dealing with a profound mystery, so profound that of it we can form no conception whatever, but this is equally the case with all

things with which we have to do. We speak of Consciousness as the power, or attribute of the soul to know the things which are present to it, but who can understand this? Who can explain how this is? Who can even conceive it possible beyond the simple knowledge of the fact? Here is a profoundest mystery into which we can in no wise penetrate; the more we endeavor to do so, the more are we impressed with its impenetrability; before it thought and imagination stand paralyzed. But this is that which we experience everywhere else. Gravitation is the power by which every particle of matter attracts every other particle, however far separated these may be; a power of tremendous force, holding worlds such as ours in their orbits, as they move around the sun millions of miles distant, and controlling the movements of the unnumbered worlds of space; worlds greater far than ours, and separated from one another by distances of which the mind can form no thought. Who can tell what this power is, or explain the how, or can think it possible beyond the knowledge of the fact? This is as deep a mystery as is Consciousness. The same truth appears in regard to all other things. Who can understand cohesion, the force which binds together the atoms of matter giving tensile strength; that of a rod, or bar of steel almost passes belief; or the expansive force of steam? Who knows what electricity is, or magnetism? What possible conception can any one have of how seeds and plants grow? The most advanced scientist is as ignorant as an untaught child; he may state the successive steps in the life-process, but to him the how is utterly unknown; no one can explain the vital union between soul and body in man. Such facts as these we know as facts, but that is all—they arise from within the mystery from which they refuse to come forth. And so with Consciousness; it is that inexplicable, mysterious power of the soul, by which we know the things which are present to us.

But while we leave the mystery attached to this power of the soul untouched, we must not add mysteries which do not belong to it, and leave unexplained that which admits of explanation. This is done by those who refer the necessary and universal confidence in the truthfulness of Consciousness to irrepressible *beliefs*, which spring up within all men upon the occasion of the acts of consciousness; men, it is said, are conscious of things, they know them, and then they believe in their reality and truth. This is but explaining one mystery by calling in another equally profound. It might well be asked, whence this belief? what makes it come? what makes it irresistible? To this no answer can be given, except that *such* is the constitution of our nature, *we are so made*. But this is as mysterious as the thing to be explained, and hence we might as well be content with the original; or it amounts simply to saying the same thing in other words—to trust in the truth of Consciousness is to believe in it, and to believe in it is to trust it.

Moreover, the supposition of these beliefs is not needed, and involves a wrong thought and an improper use of language. When we *know* a thing, it is not right to say we believe it; for our assurance in regard to it is not from *belief*, but from knowledge, and this is the true statement and explanation of our confidence in the infallibility of consciousness. This is not an indefinite, inexplicable, mysterious belief, but direct and positive knowledge. As we know things by that power, which enables us to know things *which are*, it is simply impossible for such knowledge to be incorrect. We cannot *take knowledge* of that which is not. If I *hear* a sound, there must be a sound which I hear; if I *see* a light, there must be a light which I see; if I *feel* a pain, there must be a pain which I feel. It is a clear contradiction to say that I am conscious of, that I take knowledge of something and that the exact thing which I cognize *is not*. All men,

when they know, know that they know, and can think of and can ask for no firmer foundation than this.

Herein is the simple and satisfactory explanation of the necessary and universal confidence in the infallibility of Consciousness, without the complication of introducing a mysterious belief, which is evidently unneeded. However mysterious, and this can not be exaggerated, the power with which we have been endowed may be, that of taking knowledge of *things which are*, let it be that we have such power in active exercise, and it follows as a matter self-evidently true, with nothing mysterious or strange about it, that its declarations be infallible, and that men with one consent rely upon them with implicit confidence.

We have called Consciousness the eye of the soul, that power by which the soul looks upon, cognizes the things which *are*, of the inner and outer world; hence it may be and has been called "*Intuition*." These are one and the same. "Intuition" is simply another name for Consciousness. It is derived from the Latin "*in*," upon and "*tueor*" to look; hence its meaning, "to look upon," "to see." It is, therefore, an appropriate name for Consciousness, which looks upon, sees, knows the things which are present to it. It must be borne in mind, however, in using this designation, that it is the figurative term; consciousness being the exact expression of the power and act of which we are speaking. The thing which we do in and by consciousness is "a taking knowledge of," a "cognizing," and this is the meaning of this word, its derivation being from the Latin "*con*" with, and "*scio*" to know.

There are not two powers within us, one by which we see, and another by which we know that which we see; as though we first saw an object, and then and thereby knew it. There is only the one power, that by which we directly take knowledge of the thing present itself.

This is Consciousness, and it is only figuratively speaking, and in the use of another name that we call this "Intuition." This word, however, has the value of an illustration, calling attention to an essential characteristic of consciousness, which is in some danger of being disregarded. The illustration is from the eye. We see that which is present at the moment of sight, and that which we see is the thing itself. This is the truth as to Consciousness. We are not conscious of the past, nor of the future, nor of that which is beyond our reach, or immediate presence; we take knowledge only of that which is present at the moment of cognition, and we know the thing itself.

Many, if not most, writers make a *Division* of our intuitions, separating them into "Intuitive Cognitions," "Intuitive Beliefs," "Intuitive Judgments." This, however, is a division which is not admissible; it rests upon a confusion of thought, is itself incorrect, and is fruitful of error. We have intuitive cognitions, but no intuitive beliefs and judgments; that which is mistaken for these latter, belong in reality to the former.

Our cognitive powers embrace all the varied attributes and activities of our intelligence by which we obtain and retain knowledge; by which we discriminate, analyze, work over, mould, and fashion this material; by which we reflect and argue and reason, infer and generalize, discover laws and principles, pass from the known to the unknown, construct sciences and build up systems of philosophy.

Among these powers is that by which we take knowledge of the things of the inner and outer world; and hence its activities may properly be called "Intuitive Cognitions." It is evident, however, that "intuitive" can not be applied to our "Beliefs." *Belief* is a conviction, or assurance founded upon reasons, proofs, arguments, inferences, conjectures, experiments, experience,

suggestions, intimations, testimony. Upon the testimony of others we believe that which we have been told, that which we have been taught; we believe that which God has revealed in the volume of His Holy Word. We accept that which scientists teach us of astronomy and geology, chemistry, electricity, of organic structure and life, vegetable and animal. Many of these things we believe not simply upon mere affirmation, but because of the reasons and proofs which are given. Leverrier believed, because of certain irregularities in the movements of the planets, that there must be another unknown planet; he believed because of the calculations which he made, that the planet might be seen at a particular time and place, where it was found to be by the telescope, directed according to his instructions. This is the essential character of belief; and belief is of value according to the value of the testimony, or foundation upon which it rests; a belief which has no foundation, or which rests upon we know not what, is nothing more nor better than a vain superstition.

Such being the nature of Belief, it evidently cannot be "Intuitive." Intuition is immediate knowledge, which is precisely that which belief is not; in contradistinction from the immediate knowing a thing, belief is a mediate persuasion or conviction regarding it, that is a conviction arising through or by means of something else. A belief which arises within us we know not why, nor how, is superstition. If it be said to arise in connection with, or because of intuitive cognition, it is identified with it, and its true name and nature is intuitive cognition, not intuitive belief. It is abuse of language and confusion of thought to say we believe because we know; if we already know, there is no room, and no need for belief.

It cannot be said that the same argument could be directed against intuitive cognitions; why should they not be cast aside as mere superstitions without founda-

tion, if they arise within the mind immediately, that is without something else through or by which they come, without our knowing why or wherefore? How are they any better than beliefs of like character, which are only vain superstitions? The answer is, that this is not a true presentation of the case. Immediate cognition does not mean that the cognition is itself not by or through the means of anything; that it has no foundation; that it arises within us we know not why nor wherefore; it means only that there is nothing between the knowing mind and the known object through which this is cognized; the object itself is directly known. The foundation and the reason, the efficient explanation of the case is, that the mind has the power of taking knowledge of things, and in the exercise of that power cognizes them when and because they are present; the reality and presence of the objects are the cause of the cognitions.

It is scientific, reasonable and satisfactory to speak of intuitive cognitions, but it is altogether otherwise in regard to intuitive beliefs; there are and there can be none such. Beliefs cannot be properly called intuitive even in a secondary sense, that is because they fashion and build themselves upon the material presented by intuitive cognition; for this is equally true of all other mental powers, as memory, imagination, reflection, discursive reasoning. We take the varied objects which we have intuitively observed in the material world, and by our power of imagination we construct imagery of a kaleidoscopic character, we build extravagant castles in the air; but it would be absurd to call these intuitive: and it must be borne in mind, that which has so often been insisted upon, that all the fantasies which we have are framed out of that which we primarily obtain through intuitive cognition. So with all our mental operations. Moreover, our beliefs in building themselves upon our intuitive cognitions, accept them as truths already

known; they do not confer truth upon them. With these truths at hand, having infallibility attached to them, we form our beliefs which may be of the most uncertain character. Our beliefs depend for truth and trustworthiness largely upon ourselves; upon how far they properly spring from the data upon which we build them. Indeed an element of uncertainty seems to be inherent in even the strongest faith. The Christian's full assurance of faith eventually passes into sight, which is far better. The universally accepted proverb "seeing is believing," is not inconsistent with the view which we have presented. It is not meant to be scientifically exact; it is ordinary, popular language. The meaning is not that we see, that is know, and then assuredly believe, but that all doubt and uncertainty are swept away by immediate knowledge. The people of Samaria said to the woman, "now we believe not because of thy saying, for we have heard Him ourselves and know that this is indeed the Christ;" their belief founded upon testimony had passed into immediate knowledge.

In like manner, properly speaking, we have no intuitive *judgments*; these though thus designated are in reality intuitive cognitions. In Worcester's Dictionary to judge is defined thus, "to compare things in order to form a correct opinion." Others speak of this power as that of "Comparison," by which we perceive relations. Dr. McCosh says "It is said to be the office of judgment or comparison to discover relations." Our judgments, therefore, have an element of uncertainty; the opinions which one person forms may be very different from those of another; some persons are noted for their reliable judgments, another is equally noted for his ill judgments. This is very unlike intuition, which is essentially infallible. It is, however, claimed that while the above is true of our judgments in general, there are some few relations which are self-evidently true, and are

immediately perceived by all men when they are presented to the mind, and that these are therefore intuitive judgments.

But this cannot be, because the essential element of judgment is wanting. In the case supposed, we make no comparison and form no opinion upon the result of such comparison of relations; if we did we might be right or wrong in so doing. The simple fact is, that there are things and relations between things, some of which latter are self-evident and are "*immediately cognized*" at the same moment, and by the same act in which the things themselves are known; or by a more prolonged, careful and scrutinizing observation. Thus when I see two trees, I see that they are two, not one; that they are near one another, or far apart; that one is larger than the other; that one is erect and that the other stands at a decided angle. A careless observer, or one who has looked but for a moment may not have noticed these and other relations, but to do so he needs only a repeated or prolonged and careful look; he perceives them by the same power, that of immediate cognition, by which the things themselves are seen; not by another power, that of making comparisons and forming opinions: the so-called intuitive judgments are really intuitive cognitions.

So true is this that other writers, even those who claim that there are intuitive judgments, find it very difficult to separate between these judgments and cognitions, and use language which clearly implies that they are one and the same. Thus Dr. McCosh says "I give the mind within rigid limits an intuition both of things and the relation of things." But what is the difference between these intuitions? are they not both the immediate cognition, on the one hand of things, and on the other of their relations. Again he says, "The two indeed, our primary cognitions and beliefs on the one hand

and our primary judgments on the other, are intimately connected. Every cognition furnishes the materials of a judgment, and a judgment possible, I do not say actual, is involved in every cognition. As the relation is implied in the nature of the individual objects, and the judgment proceeds on the knowledge of the nature of the objects, so the two, in fact, may be all but simultaneous, it may scarcely be necessary to distinguish between them except for exact philosophic purposes. Still it is the cognition which comes first and forms the basis on which the judgments are founded; in the case of primitive judgments, directly founded. It should be frankly admitted that what is given in primary cognition is in itself of the vaguest and most valueless character, till abstraction and comparison are brought to bear upon it." In this Dr. McCosh makes the connection very close between our primary cognitions and judgments; it is "scarcely necessary to distinguish between them except for rigidly exact philosophic purposes."

He seems also to greatly underrate the value of that which is given in our primary cognition before abstraction and comparison are brought to bear upon it. Without these it is clear, definite and of solid worth, provided we give it prolonged and careful observation; if we give our concentrated attention, we see what we see, we know what we know. It is also to be observed, that here it is said, that the judgments are formed and founded upon the primary cognitions by abstraction and comparison. But the moment we form such judgments we employ other cognitive powers, and rise above the sphere of intuition and introduce an element of uncertainty. This appears still more from that which Dr. McCosh says further, "I believe that every primary cognition may entitle me to form a number of primary judgments." This is not intuition, but opinion formed by abstraction and comparison, which may be at fault. Also "all the

primitive judgments of the mind are Individual. It is out of these individual judgments that the general maxim is obtained by a process of generalization. But this is to be observed that it is not a generalization of an outward experience * * * but of inward and immediate judgments of the mind which carry in themselves the conviction of necessity, which necessity, therefore, will attach itself to the general maxim, on the condition of our having properly performed the discursive operation." From this and the previous quotation it appears that these so-called primary judgments as general maxims, as well as individually, are formed by the discursive understanding and are of truth only as the operation has been properly performed.

It is evident that our Judgments cannot be spoken of as intuitive, without being identified with intuitive cognitions; otherwise they are lifted entirely beyond intuitions and belong to discursive reasoning, or there is hopeless confusion of cognitions and judgments. At times Dr. McCosh speaks as though he recognized that "primary judgments" were really cognitions. Thus "We discover the relations in looking at things." That is, we know the relations in knowing the things. "When we are led to discover a necessary relation, it is because we have such an acquaintance with things as to observe that there is a relation implied in their very nature." "If the question be asked—How do we know that two straight lines cannot enclose space, and that time has length without breadth? the answer is that all this is involved in our primary knowledge of space and time." "I give the mind within rigid limits an intuition both of things and the relation of things." There could hardly be more positive affirmation that we know relations and things alike by intuitive cognition.

Other writers make a close connection between primary cognitions and judgments. Sir William Hamilton,

quoted by Dr. McCosh, says: "Consciousness is primarily a judgment, or affirmation of existence;" again, "Consciousness is not merely the affirmation of naked existence, but the affirmation of a certain qualified, or determinate existence." He also says, "Sir William Hamilton and Dr. Mansel maintain that in every cognitive act there is judgment and comparison."

To avoid all difficulty and confusion, to have clear and distinct thought and to express the exact truth, we must recognize the fact that there are no intuitive judgments; that the so-called intuitive judgments are in reality intuitive cognitions; that the mind has the power of immediately cognizing things, and in so doing takes knowledge of the things themselves as they are and what they are—their nature, characteristics, properties, relations, laws, their actions and reactions upon one another. It is only by cognizing all these, that we cognize the things. By long continued, repeated, careful attention, scrutinizing observation, we take knowledge of much which before was unknown. We take knowledge that some of the things discerned are invariable, and some necessary, that is, are involved in the nature of the things as we take knowledge of them, and upon these intuitive cognitions, we by discursive reasoning, by comparison, discrimination, generalization form our opinions, or judgments, fundamental truths, formulated principles, axioms, etc., all of which are founded upon and built up out of intuitions, *but are not themselves intuitive*.

It is a serious error to mistake intuitive cognitions for intuitive judgments. The fact that the reality, the aspects, characteristics, the nature, the laws, the relations are involved in our primary cognition of things, are the very things which we take knowledge of in cognizing things, may be regarded as positive proof that the so-called intuitive judgments are cognitions. There are judgments which may be called first principles, funda-

mental truths, in the sense that they are the deepest down, or first judgments, those which lie at the foundation of our discursive reasoning, and from which such reasoning springs. These judgments may readily be mistaken as intuitive, in as much as they touch so closely upon our intuitive cognitions, and the discursive operation by which they are formed takes place almost imperceptibly, almost simultaneously with the cognitions, and is so short, simple and quick, and with such little possibility of error. Formulated into propositions, they are fundamental truths, first principles, axioms, and being directly founded upon intuitive cognitions they have the quality of necessary truths, *provided* the discursive operation by which they have been formed be correct.

We find in Dr. McCosh an interesting and striking illustration that these judgments are liable to error, and hence are not intuitive. He affirms that he and all men have an intuitive judgment that Time and Space are infinite. This is a simple impossibility. We have an intuition only of that which is present, but infinite time and space are not present to us, but only a moment of time and a very limited extent of space. Infinite time and space are, therefore, beyond the sphere of intuition; it can have nothing to do with them. Moreover, it is not true that Time and Space are infinite. Time is successive, lengthened-out duration, with a beginning and with an end, though not, as yet at least, a final end; from the present moment to the beginning of time is a measurable period, ever increasing as the present moment moves on. This is finite, and is that which the infinite is not. Infinite duration is without beginning, without succession and without end; it is Eternity, not Time. So also Space is measured expansion, or length, or distance. Known space is the distance from one known point to another; imaginary space is the distance be-

tween imaginary or supposed points. We may thus go beyond the outer bound of the created universe, as far as imagination can bear us, but all is finite, beyond is Infinitude. What Eternity and Infinitude are we know not; and how these touch and stand related to Time and Space we know not. Any judgment which declares these latter to be infinite is false, as is also any which identifies, or confounds them with Eternity and Infinitude.

Dr. McCosh says again that we have an intuitive judgment that two parallel lines can never meet. Here again he is evidently at fault. This does not come within the range of intuition, in as much as two lines of indefinite extension cannot be present to the mind for it to take knowledge of, and even of two short lines which are in sight we can not tell whether they are absolutely parallel or not. To one person they may seem to be so, while another may detect a slight inclination of one to the other, or the convergence may be so slight that it can not be detected by the most careful instrumental measurement, but will reveal itself if the lines be extended to a very great distance. The only intuition is that of two straight lines which are apparently at the same distance from one another throughout their entire length. Beyond this the case is purely hypothetical; the supposition is made that these lines are absolutely parallel, and that as parallel lines they are indefinitely extended, upon which supposition it is affirmed, that they can never meet. This is nothing more than saying, parallel lines are parallel lines—lines which do not converge towards one another, do not converge towards one another. The definition of the hypothetical lines is, that throughout their entire length they are at the same distance apart. It is a mere supposition of lines which never meet. Evidently in such a case to speak of intuitive cognition, and intuitive beliefs, and intuitive judgments founded upon these and having the character of self-

evident necessity and universality, is to confuse and darken knowledge by a form of words.

Let us be plain, simple, direct, and let us understand ourselves, and be satisfied with the proposition, supposition, or statement, lines which we call parallel are those which are at the same distance apart throughout their entire length, be it short or long.

As we have already pointed out that there are no intuitive beliefs, so now we have also shown that there are no intuitive judgments. To make the state of the case plain, it may be said that the so-called intuitive judgments, so far as they have the element of intuition, are intuitive cognitions; and so far as they are without this, they are the product of the discursive understanding; in which case they are liable to error, and may be a mere form of words, as we have pointed out.

It is all important that we have a clear and definite thought of Consciousness. It is the prime source of all our knowledge. Without it we know nothing, not even our own existence. By it we take knowledge of the things of the inner and exterior worlds; the material thus gained is that upon which all our mental and spiritual powers operate, and out of which they fashion all the thoughts and fancies and hopes and fears, all the truths, the laws, principles, axioms, sciences, philosophies and high soaring conceptions and aspirations of soul which we possess—all the garnered memories and gathered rich experience of ourselves and of our race.

Even Divine Revelation comes to us in the same way. This is not communicated to us by direct act of the Spirit of God upon our spirits, but by the external written word which we must read, or spoken word which we must hear. Without these we have no knowledge of the revealed truths of the Christian Religion. Even the truths of Natural Religion come to us through the consciousness which we have of that which is within our-

selves, and in the material world in which we live. This is not inconsistent with the fact, that the Revelation of God was given to certain men in a different way; for that was exceptional, extraordinary, miraculous, supernatural, mysterious, inexplicable.

Consciousness being thus all important the want of a clear and definite thought concerning it is disastrous. We have endeavored to present such thought of it. It is that power of the soul with which we have been endowed, by which we take knowledge of the things of the inner and outer worlds; that is of the being, the reality, nature, character, aspects, laws, relations of these things; this knowledge is infallible, because it is the cognizing of things *which are* and *which are present* to consciousness. On this account Consciousness is called Intuition, an additional name, meaning to look upon; and serving to emphasize the fact just mentioned, Consciousness being, as it were, an eye which sees things which are, and when they are within sight and are looked upon. This power of the soul is one and indivisible, no matter how varied are the things of which it takes knowledge, whether they be of the inner or of the outer world, and all its operations are the same; these cannot be divided into Intuitive Cognitions, Beliefs and Judgments; its one and only operation is that of cognition. Intuition is the intuitive cognition of things.

Consciousness being infallible is trustworthy and the Science built upon it by the inductive method rests at least upon a sure foundation. With this source of knowledge, ultimate appeal and sure foundation, we may proceed to obtain a knowledge of ourselves and the world; not that we may learn all things and fathom all mysteries, but that we may gain a knowledge of much that is within the reach of the finite human intellect, and gather material for further advancement on the part of those who shall come after us.

Our Sphere is strictly that of the *Finite*; into the infinite we cannot go. Of it we cannot think, of it we cannot speak excepting negatively. The Infinite is not the finite. Eternity is not Time—Infinite is not Space—Infinite Wisdom is not that which we know as Wisdom. God's thoughts and ways are not as ours. The Wisdom of God is foolishness with men.

My illustration is that of an eagle. It upon strong and tireless wing may poise itself in the air, may go where it will through earth's atmosphere, rising therein to its highest altitudes, but it cannot pass beyond. Beyond the atmosphere it cannot go; there it could not sustain itself; there it could not move; there it could not even live. So we upon the wings of thought can range at pleasure throughout our finite sphere, but *have no power to pass beyond*. Any knowledge which we may have of the Infinite must come through a supernatural revelation; must be reduced for us to the terms of human thought and speech; must remain mysterious, unexplained, inexplicable, must be taken entirely upon trust; as to its truth, its possibility or impossibility we have nothing to say, or think beyond that it thus stands revealed. God reveals Himself as "The One in Three and the Three in One;" but this I cannot understand, I cannot judge whether it is possible or impossible; but in as much as *it belongs to the infinite*, I simply take it upon trust on the ground of the Divine testimony.

To disregard our limitation within the finite and to endeavor to penetrate the Infinite is most unreasonable. Because men of great intellect and culture have been guilty of this folly, of this mental somersault, they have fallen into serious error.

Confining ourselves rigidly within the finite and with the definite thought of Consciousness, which we have presented, as we proceed to gain a knowledge of ourselves and the world, the question arises whence are we?

Intuitive Perception

CHAPTER II

Our Origin

SECTION I—THE TESTIMONY OF CONSCIOUSNESS

SOME knowledge of our origin is derived from the direct Testimony of Consciousness. It affirms that we are,—that ours is a continued existence, we are and we continue to be. Ours, therefore, is a past, a present and an ongoing to the future. Consciousness affirms that we must have a cause which brought us into being; by cause is meant a power adequate to produce this effect. We must, therefore, have a Maker, and this Maker, to be a cause adequate for such an effect as we are, must be equal to us; what is in us must be in Him. As we are living, personal, free, intelligent, moral beings and agents, these must in some way be in Him. The marks of intelligent design manifested in the structure of a seed, with its wonderful endowments, and in the structure of the plant with its root, stem and leaves, and with its up-growing to maturity of flower and fruit imply and prove intelligence in their maker; but as in us there is intelligence itself, with life and personality, with free-agency, the Maker of these must all the more assuredly possess these in himself. He can not be inferior to us whom He has made. He must be as high in the scale of being as we are. He must be a living, personal, intelligent, moral free-agent, whatever else he may be; however much He may rise above and beyond us.

Consciousness in affirming that we are living persons

Our real Being

Need of a Maker

and that we must have an adequate cause, affirms that we have a Maker and that He is a living Person.

This may be regarded as a *Positive Proof* of a Personal God. We do not have an intuitive cognition of Him, but we do have intuitive cognition of facts in which His being is involved, and that His being is thus involved. We thus cognize our own existence as living Persons; that, being what we are, we must have an adequate cause; that such cause cannot be less than, nor inferior to the effect which it produces; that is, simply stated in other words, the cause adequate to produce us who are living persons, cannot be less than, nor inferior to the living persons whom it produces; or to express it positively, it may be stated thus: the cause adequate to produce living persons must at least be equal to the living persons whom it produces. We lift our thoughts to our Maker, and this is the intuition which we have, "I am a living person and my Maker must be as much and as truly a living Person as I am, whom He has made."

This cannot be invalidated by saying that in like manner the Maker of a vegetable organism must be a vegetable organism himself, whatever else he may be, whereas in truth He is so far removed from it, that there is no correspondence between the two. It follows that our Maker may be so far removed from us that there is no correspondence between us as intelligent beings and Him. Because He has made us, there is no more need that He be a living Person, than that he be a vegetable organism since He has made such a thing. In reply. The intuitive cognition is that there is an adequate cause. This is as true of the vegetable organism as it is of ourselves. All that is in the vegetable organism must be in its Maker, and He must be able to do all that it does. He called into being the material of which it is formed,

Proof of a Personal God

He framed its structure, endowed it with its properties, gave it its laws and environment, He sustains it in being, and His is the intelligence which is manifested in the whole complicated wondrous structure. He is not the thing which he has made, but there is an exact correspondence between Him and it. All that is in it, the intelligence manifested in its design, all its powers, its "being" were and are in Him, as He is the inexhaustible source of such things. He is the intelligent Being possessed of all the powers with which he had endowed the vegetable organism, which inhere in it and are manifested in its activities. In like manner He as our Maker is not ourselves, the creatures whom he has made, but there is an exact correspondence between Him and us, as is the case between Him and the vegetable organism. All that is in us is in Him, from whom it comes as its inexhaustible source. He is the Being who possesses all the powers which He has given us, which inhere in us and are manifested in our activities; intelligence, emotion, will, free-agency. He may be as far removed from us as He is from the vegetable organism, He is infinitely exalted above us, yet it remains true that, though He is not the vegetable organism, nor us whom He has made, all that it and we have and are He has and is. In thinking of the plant we may say its powers of growing, flowering and fruitage are God's bestowed upon it, and in thinking of ourselves we may affirm that our attributes of thought, emotion, morality, will and free-agency are God's bestowed upon us.

This proof of a living, Personal God seems positive.

It will be observed that it is not a Judgment which we form, nor discursive reasoning. It is simply an intuitive Cognition of a fact which in its simplicity is, "*I a living Person have an adequate cause.*"

The word adequate is superfluous, but I have used it

A Maker adequate for Persons

to emphasize the meaning which without it is likely to be unnoticed. An inadequate cause is not a cause. By cause is meant that which is fully equal to produce the effect. This is brought out distinctly by adding the word adequate, as I have done for this purpose. The meaning of the cognition or the fact cognized is, "I have a cause competent to make me a living person; to give me my intelligence, emotion, will, free-agency." But this is what we mean by a Personal God; Our Maker, possessed of powers which He gives us, those of intelligence, emotion, will, free-agency. The Maker, that is the adequate cause of the material world, is possessed of the powers which He bestows upon it; the Maker of the vegetable world is possessed of the powers which He gives it; the Maker of the animal world is possessed of the powers which He gives it; and the Maker of intelligent, free, moral agents is possessed of the powers which He gives them.

This is not to be confounded with the old argument that the conception of a Personal Deity implies a corresponding reality. Our proof is entirely different; it is the infallible testimony of Consciousness that we have an adequate cause, a cause at least equal to us, which brought us into being. Nor is it the old proof from Design, which involves discursive reasoning which the "Intuition," which we have presented, does not.

I am careful not to claim that this is an intuitive cognition of God. It is not such, but it is the intuitive cognition of two facts, "I am a living Person" and "I have an adequate cause," and in these the being of a Personal God is included. All I have done is to state the testimony of Consciousness and interpret its meaning, to unfold what it contains without any attempt to infer or to argue. If there be any error in what I have stated, the error is in my presentation of the testimony of Conscious-

Answer accepted by all

ness, or in my interpretation of its meaning; the infallibility of Consciousness remains untouched and unassailable.

I have presented this proof not only to make as clear, definite and forcible a proof of intrinsic worth of a personal God, which is, perhaps, overlooked and underestimated, but also because of its important bearing upon the first answer to the question as to our origin. According to the presentation and interpretation of Consciousness which I have given, its testimony is that we come from a competent cause; one that in such sense and in such degree has intelligence, emotion, will and free-agency as to be able to give us our being endowed with these attributes.

This testimony of Consciousness as to our origin is universally recognized and accepted. I do not mean by all scientists and philosophers; some of these may to a greater or less degree blind themselves to the plain truth, and may work out systems of materialism, pantheism, atheism; but by mankind; by the human race always and everywhere; and practically and in the secret depths of their own souls even by those who theoretically deny it. The shape in which this Consciousness presents itself to men in general is possibly something like this, "I have a Maker who is fully equal to what I am." Men cannot free themselves from this; the highest culture cannot obliterate it; the deepest degradation cannot destroy it, as long as the mind is not cultivated into madness on the one hand, nor brought to the level of the beast on the other. To all who can have the thought, however feeble and indistinct it may be, "I am, whence came I?" comes the answer, "From my Maker, who is equal to what I am." "If I think He thinks, if I feel He does, if I will He wills, if I exert power He does, if I am free to act He is." In this testimony of Conscious-

Universal Thought of God

ness universally recognized and accepted, and from which men cannot free themselves, we find one of the reasons for the universal thought and worship of God among men. It has been claimed that some men have been found who had no thought of God. Such claim, however, is extremely doubtful. In such alleged discoveries too much meaning has been put into the word "God," or there has been misunderstanding and wrong judgment, or the men whose thoughts, manners and customs have been investigated, have been so low in the scale of humanity that their thought of God is too crude for expression, or they have no thought above the supply of their bodily necessities, like animals they simply eat, and drink, and sleep, and play and strive with one another; they are like youngest children, whose minds are as yet undeveloped. Degraded tribes of men with *childlike* minds, equally with little children themselves, may be disregarded. The affirmation is that as the human mind unfolds, it rises to and entertains the thought of God. So true is the universality of the thought and worship of God within men, that man has been defined as "*the religious being.*" This universality is doubtless due in a large degree to the prevalent thought of the distinction between right and wrong, and their accompaniment of merit and demerit and accountability. And also to tradition, which is a far more potent, abiding and far-reaching factor than might be supposed. Men are to-day in their thoughts and actions in a large measure what they are because of what their most remote ancestors were in their thoughts and actions. But still the universal thought of God must be grounded and rooted in the testimony of Consciousness as to our Maker.

The religious character of mankind, therefore, may be adduced as in a measure confirming our interpretation of the testimony of Consciousness as to our origin.

Proof not Invalidated

This presentation and interpretation *cannot be invalidated* by materialism, pantheism nor evolution, as other possible adequate causes of our origin.

The answer to such a suggestion is in the first place a negative one. These are in no wise included in the testimony of Consciousness as to our origin, and cannot by any possibility be drawn forth from it and, as a matter of fact, none of these are included, or implied in the interpretation of this testimony, which is universally, and indeed necessarily, made by mankind. Men being themselves spirits look for their origin in a spirit. With one accord they know that their cause, their Maker, cannot be inferior to themselves, as conscious, intelligent, voluntary free-agents. They know this so well, and with such universality, that men have always and everywhere bowed the knee and worshipped; and to-day, as in all time past, there are no questions which are so deeply and firmly rooted in the multitudes as those concerning the Great God, our Maker, and how we may be accepted of Him. The definite testimony of Consciousness is that our origin is in a cause competent to produce living Persons, conscious, intelligent, moral, voluntary free-agents. In such testimony, materialism, pantheism, evolution have no place.

But besides the negative, there is also the positive answer. These three not only have no place in the testimony of Consciousness, they are also definitely repudiated.

Materialism.

Materialism is rejected. It identifies the material and the spiritual; that which is called spiritual is only the properties and activities of matter. The testimony of Consciousness is the contradiction of this. It affirms that there are two things, or substances, the spiritual

Materialism, Pantheism

and the material, each with its own peculiar properties. which are contradictory the one of the other, so truly, that the spirit is *not* matter, it is the immaterial, and the material is *not* spirit. Spirit does not occupy space; matter does occupy it. Spirit thinks, feels, wills, matter is altogether devoid of these attributes. It is because these attributes thus contradict one another, that Consciousness affirms, that there are two distinct substances. This is the distinct and positive affirmation of infallible Consciousness and cannot be disregarded without destroying the foundation of all our knowledge. All this is included in the testimony of Consciousness as to our origin. It is of myself as a Spirit, as that which is not material, that it requires an adequate cause: it is of its immaterial attributes of thought, feeling, volition, free-agency that it affirms the necessity of such a cause. The materialism which identifies matter and spirit is rejected in its fundamental proposition, its essential thought.

Pantheism.

Pantheism is rejected no less distinctly. As its name indicates, this is the identification of all things with God. He is every thing: all things are God. The material world is God manifested in that manner; what we call the spiritual world is God manifested in that way. God, it is said, comes to consciousness in man: we are a part of God; our being is not only from Him, it is His being and His is ours. This, however, is contradicted by the testimony of Consciousness. It makes as sharp and positive a distinction between ourselves and God, as it does between the spiritual and the material. It affirms "*I am*,"—"I, mine own individual self, am."—"I have a real being of mine own."—"I am a separate entity."—"I am a spirit, as distinct from all other spiritual beings,

and Evolution rejected

as I am from that which is material.”—“I am not a part of God.”—“I am not God.”—“I am not self-existent, nor self-made.”—“I, mine own individual self, with my own attributes, am an effect, requiring an adequate cause.” This is the consciousness of mankind, and in it is the denial of the essential thought of Pantheism, which identifies that which Consciousness, with its infallible affirmation, separates; and affirms that which Consciousness denies.

Evolution.

Evolution is denied likewise, in so far as it is materialistic or anti-theistic.

It may be accepted, if it be the attempt to trace the footsteps of the intelligent Creator, to discover the mode or progress of His working by which He fulfills the counsels of His will, and brings about the design He had in view, all things being the manifestation and product of His wisdom and His power; and if it be granted that the spiritual is not evolved out of the material, but that God is the author thereof. Otherwise, evolution must be rejected; it cannot be accepted as a possible mode of accounting for our origin. If it be altogether materialistic, as its presentation often seems to be, it has against it the full force of the objection already mentioned in speaking of materialism. It makes no real distinction between the spiritual and the material. Our bodies have been evolved out of lower preceding forms, and part of such evolution was the evolving consciousness, sensibility and intelligence, the developing nervous system with its brain being that of which they are the production. Thought is strictly brain-work; memory simply the record impressed upon the brain, as the message is impressed upon the strip of paper by the telegraph instrument, or the voice is impressed upon the

Evolution is mere Succession

foil or on the cylinder in the phonograph. There is no separate indwelling soul, but man's highest attributes equally with those of his animal nature, result from the properties and activities of the material world, and perish with the destruction of brain and nervous system.

Moreover, materialistic evolution affords no real cause for our being. It is mere succession, not causation. I remember how surprised, and how deeply impressed, I was when I first read of evolution. There was in it nothing but the following of one thing after another. Nothing formed the first germs of life; nothing caused the variations; nothing determined their character; nothing made them better fitted to their environment. They began by chance, they followed one after another by chance, they were of one kind or another by chance, the final outcome was by chance and might have been anything else rather than what it was. Tophinard, President of the Anthropological Society of France, says in his "Anthropology," 532. In the remotest past by "the fortuitous union of certain elements of oxygen, hydrogen and nitrogen," the first germ or germs of life were formed. Unless this be intended as a simple statement of agnosticism, or nescience in regard to the origin of life, it is the denial of causation, that is of the fundamental principle of all science. In either case there is no cause given for our origin. Nothing caused the elements of oxygen, hydrogen and carbon to unite together; nothing made them unite in such a way as to produce the germs of life; nothing gave them the properties which enabled them upon uniting to produce such a result. And if it be thus with the first step in the progress, or the first link in the chain of succession, the same principle would be true of the succeeding steps or links; they also may be causeless, one, more or all.

If a seed which I plant in the ground with all its won-

and is without Power

derful powers of germination, growth, flowering and fruiting can come into being without a cause, equally well may the perfect plant covered with full bloom and fruit come into being without any antecedent growth; without anything that made it. If the first germ of life with all its powers of reproduction, heredity, variation, development up to man, came into being countless ages ago by chance with nothing that caused it, equally well may the perfect man, possessed of all his spiritual powers in full activity, come into being in a moment without any antecedents and without a cause. And as a matter of fact, no cause is assigned for all the endless varieties throughout the entire series. From beginning to end there is the want of power; of creating, making, producing power; power which made oxygen, hydrogen, carbon; which gave them their properties; which made them unite in such a way as to form the first germ of life; which endowed it with growth, reproduction, variation, heredity; which gave it its environments, which adapted the one to the other; which produced the variations, which determined their character, which changed the conditions of life, which decided and brought about the final result. The whole scheme of materialistic Evolution is like a complex piece of machinery without motive power, as a steam engine with no fire, no steam, no propelling force, it is useless; so also is materialistic Evolution in regard to the origin of man. It may trace out our ancestry, but has no answer to the question—whence came I *with my long ancestral line?*—but accident, chance, causelessly. Materialistic Evolution either does not trace us back to our origin and gives no answer to our question, or it denies the positive testimony of Consciousness that we came from an adequate cause. As a matter of fact, it is acknowledged that it does not account for our spiritual endowments, and that through-

Something missing

out the entire series there is something missing, something needed to make its explanation valid and to bind all together with a bond closer than that of mere succession. The search for that which is thus needed must be in vain, till it be found in the power and wisdom of the intelligent Creator, who in the beginning brought into being the original elements of the material universe, endowed them with all their properties and laws, and who has carried on their development, working only by secondary causes, except in extraordinary cases for some high purpose, and where the direct act of His power is needed in the introduction of that which is new, as vegetable and animal life with their variations; and the god-like spirit of man. Spontaneous generation of life is denied by the highest authorities. Evolution must become Theistic to be accepted as an explanation of our origin, and even to be itself possible as a science. As Materialistic it denies the fundamental truth of all science and perishes by its own suicidal hand. The basis of all science is, "every effect must have a cause." Materialistic Evolution does not openly deny this; it ever proceeds, as it necessarily must, upon the assumption of its truth; its every step and act is the seeking for and unfolding the causes of things. But it denies this essential principle in failing to trace all things to a first cause, and in assigning no cause for life with all its properties and activities, and no cause to innumerable steps in the series of development and variation, and none to the human spirit and to the character of the final issue. According to it accident and chance are at the beginning, and are continually reappearing to the very end. The chain hangs upon nothing, and many of its intermediate links are broken. If there be no first cause, it is vain to speak of any others; if the material universe can spring from nothing, and the first germs of life with all their potency

Cannot be Neutral

may be without a cause, the Cosmos as it now is, and every living creature and man in full maturity may equally come from nothing. We need affirm of them only that they are, and science, which is the knowledge of things in their causes, is swept away. Evolution so far as it is materialistic and antitheistic is no science, and it cannot be neutral as Huxley affirms.

He says that "it is neither theistic, nor atheistic, just as the Copernican System of Astronomy is neither."

This system may be so regarded, if it be taken to mean simply the *plan*, or *map* of sun and planets, as arranged by Copernicus. A diagram setting forth the relative position and movements of material bodies may be correct, or incorrect, but it has nothing to do with atheism, or theism. The question as to these in no wise arises. But in this sense, there is no correspondence between the Copernican system and Evolution, and the former is no illustration of the latter; it simply makes clear the thought in Huxley's mind, namely, that Evolution is neutral. But let the Copernican system mean, as it really does, the *explanation* of the movements and the phases of these heavenly bodies, as Evolution is an *explanation* of living beings, and the case is entirely different.

Copernicus placed the sun in the centre to account for these observed phenomena. He sought for their true cause. His basic principle was "every effect must have an adequate cause." As the observed solar and planetary phenomena must have a cause, so also these bodies themselves with their inherent forces and their arrangement in the solar family must have their adequate cause; and he traced all these up to their first cause; to that pre-existent being possessed of all that is needful to be competent to bring into being and form all things what they are and as they are. Here is the thought of God,

Theistic or Antitheistic

at least in rudimental germ, and more and more definite as intelligence, purpose, design, the adaptation of means to ends, and the accomplishment of ends by means are the more evidently observed in the realm of Nature. All this is true, and to a greater degree, in regard to Evolution, as it deals with higher forms of existence. It is the attempted knowledge of things in their causes. The problem is thus to explain the whole realm of organic being, and that of consciousness, and intelligence, and free-agency animal and human; not only in their separate parts, or steps, but as a great unit, an organic and intelligent cosmos, as it were. It has and it must have something to say as to this cosmos. Being what it is and has been, Evolution must explain it in its cause. What brought this cosmos into being, what endowed it with its power of development, what made the system of development such as it is? If it make it come from nothing, from accident, or chance, or if it introduce these in a single instance, as it traces progressive development, it is atheistic, or anti-theistic. But if it give to every progressive step its cause, and assigns the first beginnings, and the entire system as a unit, "the organic and intelligent cosmos" to an adequate cause, it is theistic. It traces all up, not to that of which we might think with only a rudimental thought of God, but to that being, who is such an one, that from Him may spring not only the wonderful organisms, whose complicated structure implies intelligence, but also consciousness, intelligence, free-agency themselves, as possessed by animals and man. For Evolution there is no middle ground, no possible neutrality; it is and must be theistic, or atheistic. If the former it does not conflict with the testimony of Consciousness as to our origin; if the latter it does conflict with it, and must be rejected.

It thus evidently appears that Materialistic Evolution

Why rejected

cannot be accepted as a possible mode of accounting for our origin for these reasons: *First*. Because as far as it is materialistic it denies the essential difference between mind and matter. *Second*. Because it affords no real cause for our being. It endeavors to trace it up through successive steps to a primitive germ or germs, but not to a first cause, the very thing sought for. It does not say from where the germs came, or, if from united oxygen, hydrogen and carbon, whence they and their union came. It fails also to account for our spiritual powers. *Third*. It denies cause and effect; it substitutes succession for causation. It is without active, producing power. The germs of life appear; they grow, reproduce, vary, inherit; their environment appears; it changes; they adapt themselves to it and thus through the ages. There is no power causing these effects. No power which formed the germs, and made them appear; which made them grow, reproduce, vary and inherit; which formed their environment, made it change and caused the organisms to change with it. If it be asked what made my parents vary from their ancestors and what made me inherit their peculiarity, no cause is given. If it be referred to inherent powers, whence came they? The whole system springs from nothing and is bound together by nothing. All is left mysterious, inconceivable, miraculous. A seed is cast into the ground; it germinates, grows, blooms, *we know not how*. *Fourth*. It is a simple assumption of all life, and is a self-deception. It assumes that man and all the endless varieties of animals and plants *were in the fulness of their being already within* the first germ, or germs of life, and have come forth from them by a simple unfolding of that *which already is* as the writing on a rolled up strip of parchment comes forth as the parchment is unrolled. Men deceive themselves in supposing that a coming into

Agnosticism rejected

being in microscopic form of infinite minuteness, with an unfolding through millions of ages, is any the less miraculous, and inconceivable, than the instantaneous appearing of all forms of life as they now are. Evolution is essentially the unfolding of that *which already is*, and is no more an explanation of it, than the unrolling of the parchment is the explanation of the writing thereby revealed.

In rejecting Materialistic Evolution, we have said that Theistic Evolution may be accepted. But we have used the term Evolution in a very general and popular sense and not in its true meaning, and shall soon point out that the word itself is inappropriate, and should be rejected as a designation of the progressive advancement of life.

But if Materialism, Pantheism and Materialistic Evolution be rejected, may not Agnosticism be accepted as a possible answer to the question of our origin?

Agnosticism.

The affirmation of Agnosticism is that God is unknown and unknowable. We do not know that He is, and if He be, we can have no knowledge of Him. Both these propositions are untrue. We know assuredly that beyond the finite world there is the "not-finite" from which it comes as from an efficient cause. This is the testimony of Consciousness universally recognized. Thus knowing that there is a "First Cause," we know that it must be of such a nature, or have such a character, or such attributes as to be competent to bring into being the material Cosmos, all forms of organic life, and intelligent free agents such as we are. All this in some true sense and degree must be in it. It is true that we can have no knowledge of God *as* infinite, *as* absolute, but it is also true that we may know Him, as He has made Himself known in His works.

Nature of Knowledge

Our knowledge of things is in a large measure a knowledge of that which they do, or have the power of doing. Because of his work, we say of one man that he is a carpenter; we say of another because of his work, that he is an author; of another that he is a poet; of another, because of his buildings of marvellous architecture, that he is an architect. We may know nothing more about these, but we know thus much concerning them. We know their works, and that these men are such, that they can produce them. I may show you a small piece of something. You do not know what it is. I place it at a great distance. In a few minutes, by reason of a blow, or a spark of fire, it explodes with destructive force and deafening detonation. You do not know what it is made of, nor how it is manufactured; you can have no conception of how, or why it exerts that terrific force. But you have some knowledge of its nature and character; you name it "dynamite," and handle and use it accordingly. Your knowledge is true, and practical, I place before you a small box, concerning which you are altogether ignorant. I touch it; you hear coming from it music, the tune of which is familiar to you; six or seven tunes are heard, one after another. You may have no idea of the mechanism which produces the music, but you know what it can do; you call it a "music-box," and at your pleasure you touch it, and it sends forth its sweet sounds. Your knowledge, though so limited, is true and practical. I may place you blindfolded in a room in which there is a man. He calls you by name; he speaks to you in English, in French, Italian, Spanish, German, Greek, Latin, Hebrew, you know that he is a linguist. He narrates ancient and modern history to you, you say that he is an historian, with a wonderful memory. He repeats long passages, gathered from the great authors of English, French and

Illustrations

German Literature. He speaks with fluency of the discoveries made in Egypt, Assyria, Babylon, Chaldæa. He discourses of statesmanship, science, philosophy; of morality and religion; and in thus speaking the tones and intonations of his voice are those of earnestness, conviction, deep emotion. All this is what he can do, and what he does. In knowing this you know him. The above is the definition, the description, the character which you give of the man. The woman of Samaria expressed her knowledge of Christ by saying, "Come, see a man that told me all that ever I did." So in the supposed instance your knowledge of the man is of that which you heard him speak. You are totally ignorant of all else about him. You have no conception of how the human voice frames itself and expresses the thoughts and emotions of the soul;—of how the brain acts in thought, memory and speech;—of how different forms of language, history, literature, antiquities, statesmanship, science, philosophy, religion are grouped, arranged and fashioned into forms of speech by the mind;—you do not know what the invisible, intangible soul is, nor how it is in vital union with the body;—all is veiled in impenetrable mystery, but you know the man because you know what he can do; you know his powers, the attributes with which he is clothed; your knowledge of him is true, definite, practical. You avail yourself of it. You treat the man with confidence, respect and honor, and furnish your own mind with the abundant information which he imparts.

These are true illustrations of our knowledge of God. He is as invisible and intangible as the human soul, deeper mystery envelopes Him, than rests upon it. But we know him in his works, just as we know the soul and things material. The Cosmos has its origin in Him. It consists of worlds and groups and clusters of worlds;

God known in His Works

they are bound together in orderly arrangement and movements by forces and laws, which they invariably obey; light and heat radiate everywhere; all forms of organic life grow and flourish in environment adapted to them, as they are adapted to it; harmony and beauty prevail. To the contemplating mind, the spectacle is soul inspiring, and we say with the poet that God "Planned and built and still upholds the world so clothed with beauty." *This is our knowledge of Him*, a knowledge which is the truer and the more profound, as we learn more of, and understand the better the wonders of His Creation. The world of animal life has its origin in Him. Such is the order and harmony prevailing in it, that we make the classification of groups, orders, genera, species, varieties, families, all forming a united whole; we see the complicated structure of the animal organism, and its union with the indwelling animal soul. God is the one who formed all these. Above all, our knowledge of Him is as the author of our being. We contemplate ourselves, our consciousness, intelligence, will, free-agency. This is God's doing; this is our knowledge of Him. He is veiled in deepest mystery, but we know that such is His nature, character, attributes that He can do all this. He is the one who gives us our being. He is the former of our bodies and the Father of our souls. This knowledge of Him is as true and reliable, as definite and practical, as our knowledge of our fellow-beings. We define them by stating what they are capable of doing. They are beings who think, and learn, and know, and remember, who reason, and will and clothe their thoughts in spoken language.

Thus also we know God, and give a *definition* of Him by stating what He is capable of doing. He is that being, who made heaven and earth and all that therein is. He is the one who made us and endowed us with all our

Definition of God

Realism

wondrous attributes, and with such knowledge of Him we may well ask "He that planted the ear, shall He not hear? He that formed the eye, shall He not see?"

It is vain to say that we do not know God, when we know His doings; when His works are around about us, and we are His workmanship. By one great effort of thought take in the whole material universe: think what it is in its structure, properties, activities as revealed by science; include in the thought the innumerable multitudes of mankind from generation to generation through the ages; then think—God is capable of all this—such His attributes that from Him all this proceeds. He is the author of the Cosmos. Agnosticism must be rejected. We know God because He has made Himself known by His works. He has showed what He is by His doings. Our knowledge of *these* is our knowledge of Him. We do not know the substance of the invisible human soul; we know only its attributes, what it is capable of doing. We do not know the substance of the invisible God, but we do know His attributes, we know what He is capable of doing. We know Him as truly as we know ourselves, and the world in which we live.

We have thus removed the various alleged obstacles in the way of accepting the Testimony of Consciousness, as we have presented and interpreted it. And we have dwelt upon the discussion at some length, because of its all important nature.

Thorough-going Realism

Our fundamental thought, or truth, is that of Thorough-going Realism. There is a real God; a real universe; we are real beings; we have a real knowledge of God, of ourselves, of one another, of things: and the origin of our knowledge is Consciousness, Intuition, our cognizing the things which are, which Consciousness is

The True Testimony

infallible. It is, therefore, needful at the out-set to vindicate this infallibility and to show that God really is, and that we have a real knowledge of Him and of our origin in Him. It is to be observed that Consciousness being infallible, its interpretation may be correct, or incorrect.

If incorrect it is to be cast aside, while the infallible testimony remains; but if correct it is clothed with the infallibility of Consciousness. The interpretation, which we have given, may be correct or incorrect, but upon the supposition that it is correct, it must be infallible truth. It is simply the presentation of the infallible testimony of Consciousness as it really is. We have, therefore, endeavored to prove the correctness of the interpretation which we have given. And again it is to be observed that while the testimony needs no confirmation, the interpretation which may be given of it does. All possible objections to it must be removed as far as can be, and confirmations of various kinds, and from various sources be sought and secured. This latter we will present, as we proceed; the objections, in some measure at least, we have endeavored to remove at the out-set.

In interpreting the testimony of Consciousness as to our origin we must be careful to give its fullness of meaning, but at the same time not to read into it that which is not there. What has been said in our discussion of Materialism, Pantheism, Materialistic Evolution and Agnosticism not only removes these as alleged possible answers to the question of our origin, but also serves to support the correctness of our interpretation of Consciousness and bring out more clearly the fulness of its testimony. It affirms that we have our origin in the being fully competent to be our adequate cause. He must be equal, not inferior to ourselves. In the light of what has been said, we now the more clearly see that the meaning is, that we know Him in His works, in His

Scientific View of Religion

doings. He has those attributes because of which He is our author, our maker. This is our knowledge of Him. He is the former of our bodies and the Father of our spirits. He is the author of us, living persons. He is a being equal, not inferior to the living persons, whom He has made. Immeasurably and mysteriously more it may be, but assuredly this, a Living Personality.

SECTION II DIVINE REVELATION

The next answer to the question of our origin is from Divine Revelation. It may seem that this should not be here introduced. There are many who deny and reject such revelation. On the other hand, however, there are multitudes who accept it. Its presentation in no degree invalidates what has already been or may yet be said, and, moreover, we present it in a strictly scientific way.

Man has a religious nature, as truly as he has an intellectual nature. There are phenomena and history of the former, as really as there are those of the latter, and the former, as much as the latter, are the proper objects of scientific research. It is assuredly true that there is such a people as the Jews, and that their history is known and is traced back to between one and two thousand years B. C. We know their religious phenomena, their religious beliefs, worship, rites and ceremonies, manners and customs. Their sacred books have come down to us and are read by ourselves; they claim to be a divine Revelation. Two thousand years ago there was born of this people Jesus Christ, who lived and taught in Palestine, possessed of such high intelligence that he dominated others, and of thorough goodness in the highest and fullest meaning of the term. He claimed to be the Son of God and a messenger or message-bearer from heaven. He accepted the sacred Book of the Jews as the Word of God, and reaffirmed its statements. We

have the record of His life and teachings, written in large measure by those who were His intimate companions for years; a record, the genuineness and truth of which, no criticism, however searching, friendly or adverse, has been able to invalidate. These, without a single exception, are known facts, as much so as any facts of history, ancient or modern; and as the facts of astronomy, geology, physiology or biology. We have the additional facts; the influence of Jesus Christ in the world, its character, its power, its extent, its endurance, its increase. In all these respects it is incomparable, absolutely unique.

His influence is the source of the highest intellectual and moral advancement the world has ever known. It has given untold comfort, hope and joy, and has aroused and attracted such love that in all ages millions would die for Him, if need be. It has spread itself throughout all lands and time, among all people, tribes, tongues, races, nations and among all classes and conditions of men. It is equally suited to the noble and peasant, to high and low, to educated and ignorant, to the cultured and the savage, to the intellectual and the simple, to men, women and children. Its vital power is as great to-day as it was two thousand years ago, and more actively at work and manifested than ever.

All these are known facts, and are for scientific investigation and explanation; and we cannot ignore them without depriving ourselves of one source of scientific knowledge and holding ourselves backward in knowing the great realities which are.

What is the scientific explanation of the facts of the Jews and their history? Why are they the peculiar people that they have been in this and in all lands, and in all times past; and why have they had, as a nation and race, the experience which has been theirs. They are a

Unique Facts**Explanation**

unique people. Through a period of four thousand years they have maintained an undiminished race vigor, with their peculiar religious beliefs, laws, manners and customs and race characteristics, with a future now opening before them equal to that spreading itself before any other people. They have witnessed the fall and the rise of the civilizations and the nations of the world, one after another. They have seen the civilizations and kingdoms of Chaldæa, Assyria, Babylonia, Persia, Egypt, Phœnicia fade away; they have looked upon the rise and fall of Greece and Rome. When all Europe was barbarian, and the Western World unknown, they were a powerful, rich and cultured nation; and they have watched the upgrowth of all the nations of the present civilized world, themselves a never-changing presence amid all changes.

What is the explanation of these unique facts, forming, as they do, a unit of four thousand years' duration? How is this unit to be accounted for?

An explanation has been given. God called the Jews to be, and made them a most peculiar people. He raised them up, multiplied, disciplined, trained them in Egypt, brought them into the wilderness; there organized them into a nation; gave them their laws, religious forms and ceremonies, institutions; established them in Canaan; led them into captivity in Babylon because they forsook Him; restored them from exile in preparation for the coming of Christ; dispersed them among the nations because of their rejection of Him, and maintains them, as a people, as an abiding witness of the truth concerning Christ.

This explanation is one of long standing, and most wide-spread acceptance. It is clear, definite, intelligible, most reasonable, connected, adequate, incomparably superior to any other which ever has been, or can be sug-

The only Adequate One

gested; and the only one which is competent to spread itself out over the four thousand years, and bind all the facts together in a connected and united whole. It alone gives significance to the Jewish history from its beginning to the present day; and it alone dovetails it into, and connects it with the known facts concerning Christ, and gives a satisfactory meaning to it, in its connection with Him, the Son of God, as we must acknowledge Him to be.

Concerning this explanation, three suppositions alone are possible. *First*, that the Book containing it is the record of the aspirations and hopes of Jewish patriotism. *Second*, that it is the record of careful observers, who have studied the facts and have discovered, and made known their true character. *Third*, that the Book is what it claims to be, the revelation of the true character of the facts by Him, who is Himself their author.

Of the first of these we will speak presently. The second cannot be true; for the facts must be consummated before they can be observed, and their character and explanation be discovered. The nebular hypothesis could not have been made and established before the solar system had been formed. The Geologist must have the completed record of the rocks, and of the earth as it now is, before he can explain the meaning of earth's strata and of its diversified surface. The Biologist and Evolutionist must have the facts of organic life from the remotest past to the present, before their sciences can be made. The historian must have the connected series of events through years and periods, that he may unfold their significance, and transform annals into scientific history. So the facts of Jewish history must be completed, before they can be examined, and their explanation thereby be discovered; but the Old Testament, which gives it, was concluded four hundred years before

The Record explains the Facts

Christ. Men now living might possibly of themselves with the Jewish history before them, continued down to the time of Christ, and the destruction of Jerusalem, and to the present day, be able to discover the relation of that history to Christ from its beginning, and give its true explanation, as above presented, but this could not have been done by those, who lived at the date of 400 B. C. and earlier.

At that time there was nothing in the mere facts of Jewish history to show their bearing upon Christ. Men might have seen the hand of God in raising up, guiding and dealing with the people and for some great purpose, but for what they could not tell, yet the explanation was given in the Book, which was completed at that time. Step by step with the *record* of the events, their *true explanation* is given in reference to events centuries in the future.

It cannot be claimed, as has been done, that this is only the speculation of ambitious patriotism, to animate the people, with the hope that they would become a kingdom greater than Assyria, Babylon, Egypt, under a warlike, conquering Prince, a second David. This is a gratuitous supposition, while the fact remains that this ancient record, as a matter of fact, affords the true key, which alone unlocks the problem of the four thousand years of Jewish history as we see it to-day. The fair assumption is that He who made the lock, is the one who made and gave the key; that He who is the author of the long line of historic facts, is the author of the ancient record, which affords the explanation of them, which explanation was necessary for the practical utility of the historic facts. As a lock is of no use without a key, so the long chain of historic facts would have failed for the end for which it was made, had the authoritative explanation not been given. The Jewish history is the

and claims to be Divine

root and stem of Christianity, and of this there was need that an authoritative affirmation be made.

Again, the Record claims to be divine, and has been widely accepted as such from the first till now, by men of the highest intelligence and most superior character. Again, the Record is such that it accords with the divine origin, which it claims for itself. It commends itself as simple, credible, trustworthy, as a divine revelation.

It is, moreover, inseparably connected with the New Testament, together with which it is the foundation and power of the world's modern advancement. "The Word of God" has given peace, comfort, hope, joy to multitudes of men; and has radically changed the depraved character and life of men, working in them a true and abiding reformation of the most exalted nature. The true Christian character is the highest conceivable. It is no mere supposition, but an indubitable fact, as much so as anything can be, that this character has been wrought in cases without number, and unceasingly *augmenting* by "the Word of God."

Against all this no valid objection can be made. It is gratuitous to say that there is no divine revelation; that God does not act in this way. If there be a Personal God, and if His hand be in the facts of Jewish history, as the facts show that it is, it is certain that He could give a revealed explanation of them; and that He has done so is evident from the considerations which we have presented. The facts which we have mentioned are not only in accord with this, but some of them cannot otherwise be explained.

A Book which has wrought all that the Word of God has wrought and is working in the world, cannot be a mistake nor a fraud; and, moreover, we have the positive testimony of Jesus Christ, who taught that the "Old Testament" is the Word of God. This is conclusive

Testimony of Christ

proof. At this day it is folly to deny that Christ is God. He stands as such before the world, known to be God by many infallible proofs, continually augmenting. Of superior intelligence and perfect goodness, He could neither have been self-deceived, nor have deceived others. The known facts concerning Christ, and His influence in the world throughout these two thousand years, as we have briefly stated them, admit of no scientific explanation except that He is what He is claimed to be, the Son of God and message-bearer from heaven.

The proof of Divine Revelation is far stronger than as we have given it. But we have purposely refrained from going into detail, and have intentionally confined ourselves to a few facts, which cannot be questioned, which cannot be disregarded, and of which a scientific explanation is required. The case stands thus: the known facts of Jewish history for four thousand years, and of the Old Testament, and inseparably connected with these, the known facts of Christ and the New Testament, and of the Christian Religion and Civilization, scientifically considered, require the explanation that God's hand is in them, and that He has given the world a divine revelation.

Answer given by Divine Revelation

This being so, as is most widely acknowledged, we have from this Revelation an answer as to our origin. It is very emphatic and definite. We come from the creating hand of God. He made our body out of the material of the material world, and breathed into it the breath of life, so that man became a living soul. We are His offspring, bearing His image and likeness. As God is a person, a spirit, so also are we. We, like Him, are intelligent, moral, voluntary, free-agents. Man is a spiritual being, in vital union with a material body, which is its dwelling, its garment, its organ. The affirmation is,

Answer of Revelation

that God made the body out of the material of the material world, but caused the spirit to go forth from Himself; that is gave it its being by the act of His own creating power. From the first human pair onward, the body springs from ordinary parentage, but in each case the spirit from a distinct act of new *Divine Creation*. There is nothing in all Scripture contrary to this, and it accords perfectly with the language employed; we are the *offspring* of God; His *children*; and God *breathed into* his nostrils the breath of life and man *became a living soul*. Prof. Guyot has pointed out that in speaking of man's creation, the peculiar Hebrew word is used, which means creation in the strict sense of the term, "making something out of nothing," "bringing in a new existence," and which is used only three times in the account of Creation, and in each case with the same meaning.

It is also required by all that we know of spirit; it is an indivisible unit. The possibility of one human person giving rise to another human person is inconceivable. It is true that we cannot know how a living material organism can reproduce itself, but the fact and the process we can readily understand. It is by division and subdivision of itself, and the construction of the new organism from the material taken from the food supply. But there is nothing of the kind like this in the realm of spirit. A spirit is a living individual unit, complete in itself, and for another such being to come into being is a new creation: it *was not*, *it is*, and the only thing possible which we can do is to refer the new being, or *entity* to the creating act of God. I, a living Person, am not a part divided off from the persons of my parents, nor constructed from some already existing spiritual substance. Both of these are inconceivable, so far as we have any knowledge of the spiritual; and the former, no less than

Consistent with Heredity

the latter, requires the intake of food, both by parents and offspring, to restore the parental loss, and to enable growth in the offspring.

The view presented is not inconsistent with *Heredity*; that if each person be a new created being, there would be no inheritance of spiritual nature, good or bad, nor of personal traits of character. Inheritance must not be exaggerated; in innumerable cases the parental spiritual characteristics do not reappear in the offspring. Men of eminence often spring from a common-place ancestry, and such men seldom have children as distinguished as themselves. Moreover, the ancestral, or family spiritual characteristics may be the pattern after which the new being is created.

God has designed that there be variety of character and endowment among men. He has gathered them into races, classes, groups and families.

When He creates a soul, it is not at random, but intelligently and purposely, the general rule being to create it after the likeness of the parents, or according to the family and race type, with the result that in children traits of former generations may appear, as well as those of the immediate parents themselves and even to a greater degree.

Still further, the inherited characteristics may be accounted for by the vital union of the soul with the body, and the vital union of parent and child before birth. The influence of the vital union can hardly be overestimated. The thoughts, feelings, emotions, hopes, fears, suffering and sorrows and joys of both the father and the mother have a moulding and determining influence upon the unborn child, in generation, conception, and growth, and men are in a large measure what they are, because of the character and condition of their bodies; even mental, emotional and voluntary activities are largely dependent

A Moral Objection

upon brain and nervous development. This thought lies at the basis of the proverb, "*mens sana in corpore sano*," which expresses the common judgment of mankind in this particular.

A *Moral Objection* has been urged, that God cannot create depraved souls.

The answer. Man's depraved condition is due to God's judicial act because of the first sin.

Our first parents were created without depravity.

It cannot be supposed that the *mere act* itself of one disobedience could deprave human nature. That in which their fall consisted was "a rupture with God." They were on *probation*, and God judicially withdrew from them and their posterity as punishment for their disobedience.

All things must have their own "habitat," their own "environment." They must live and move in their own sphere and for that for which they were designed and made, and for which they are especially adapted. Otherwise they cannot be their *own true selves*.

Thus our first parents were made for union and companionship with God. His Spirit dwelt within them, their counsellor, guide and guard, the source of the good within them, His presence the very atmosphere in which they lived and the very inspiration and sustenance of their life.

Upon disobedience, as punishment of their sin, they were cast off from the presence of God. Thus parted from God, taken out of and away from their proper environment, their nature was depraved as truly as is that of a plant removed from the florist's care. All the essential elements of the plant remain, so all the essential elements of "man" remained; but there is depravity in both cases, so that the former true self is hardly to be recognized.

The First Man

The First Woman

This is in accord with what we know additionally. The *only real hope* for man is *recovery* of union and fellowship with God.

Thus the difficulty is removed. God does not create depraved souls. The soul as it comes from His creative power is without sin, it has all the essential elements of man, but it falls just as the first man fell; it is, because a member of a fallen race, judicially apart from God, with the consequent depravity.

A further statement is made. God made man *Male* and *Female*, with some difference in the mode in the two cases.

The first man was formed, it is not stated how, by God out of the material of the material world, as to the body, and the human soul made and vitally united to it, but the first woman was taken out of man. The exact language employed to describe this may be of difficult interpretation, but the essence of its meaning is plainly given, *woman was taken out of man*. From the perplexing language used in the description two additional thoughts evidently come forth. The woman came not from man's head, nor limbs, but from the body, the trunk; this may be all that is meant by the word "rib." The second thought is, that all trace of her forthcoming was obliterated, and so effectually that not only were no evidences of it left, but the possibility of a like occurrence taken away; this may be all that is meant by the expression, "and closed up the flesh instead thereof." The deep sleep, which is said to have been brought upon the man, may be taken to mean, that he was not conscious of that which took place.

It will be observed that here certain facts are made known; there was a difference between the origin of the man and that of the woman. God made the first human body in some way not stated; He made woman by

Revelation and Science

bringing her forth from man, but in the case of the first woman alone. These are facts to which all explanations and science must conform. No science can be true which denies them; and any suggested explanation may be true or false without affecting the facts,

This is the true *Relation* of Revelation and Science, which is so greatly misunderstood, and so often discussed. The Bible, with a very few limited exceptions, merely states facts and describes phenomena without pointing out the "how," or giving any explanation; while science endeavors to *explain* the facts with which it has otherwise nothing to do except to observe and collect them. The spheres of the two, therefore, are entirely distinct and there can be no conflict between them. Hence also one system of science agrees with the Bible neither more nor less than another. Thus, for example, the Bible speaks of the rising and the setting of the sun. This is a mere statement of natural phenomena which we all plainly observe. These phenomena the Ptolemaic system explains in one way, and the Copernican in another; but as far as the Bible is concerned either of these may be accepted. If we accept the one, and then, throwing it aside, accept the other, we do not have to change the Bible nor our interpretation of it unless we have read into it something that is not, and never was, in it. With the change of the mode of explanation we no more have to change the Bible than we have to change the phenomena of Nature. In Nature the sun rises and sets; the Bible makes mention of this fact; these both remain, while men attempt in one way and another to find out the true explanation of *how* it is done. Again the Bible affirms that God made the human body out of the material of the material world, "the dust of the ground." This fact remains immovable, and men are perfectly free to endeavor to discover how this

Revelation gives Facts

was done, and to say with equal propriety according as it seems to them, that it was by an instantaneous act of divine power or by a divine process of long-continued evolution, or by some other divine mode of working. Again the Bible affirms, God made the stars, the sun, the moon; this fact also remains, however men may explain the mode. It may have been by instantaneous creation, or according to the nebular hypothesis. The theories and speculations of men may rise and fall and succeed one another in long procession, but the lights which God has set in the heavens shine on in undisturbed tranquillity, just as does the Bible statement that God made and placed them there. So also the statement that God made the "Light" agrees equally well with any scientific theory of the origin and nature of the light, which does not deny the fact itself, that God made it. You may take the whole Biblical account of Creation and adopt any scientific scheme, no matter what, as long as the stated facts are not denied; God made all things by successive works and in the order named. The same principle applies to the standing still of the sun and moon in the time of Joshua. If the fact be admitted, it may be explained as you please. You may believe that it was by an act of omnipotent, supernatural power, God so willed and it was done; or you may believe that the earth is at rest, with sun and moon moving over it, and that the sun was arrested in its course, together with the moon; or that the sun moves through our heavens because of the rotation of the earth on its axis, and that the earth's rotation was stopped for the time; or that the fact was brought about by extreme refraction of the light of sun and moon by earth's atmosphere; or some other theory may be adopted. The point is that the Bible agrees equally well with all explanations, because it gives no explanation, but here, as in all cases, simply states

The Facts given

the fact, which in the present case is that by divine command Joshua makes sun and moon stand still.

We have dwelt upon the relation of Revelation and Science because of its importance in itself, and that the teaching of the former as to our origin may be distinctly understood. It, without any explanation, simply states the facts—God made man in His image and likeness, male and female—He made the first human body, the mode not stated, out of the material of the material world—by an act of new creation He brought into being the first human soul, and united it vitally with the human body, as he does in all succeeding cases—He made the first woman, and her alone, by bringing her forth from the body of man. This is the teaching of Divine Revelation as to our origin, and this is all that it gives; the only possibility of error being that we may have misunderstood the exact import of the Hebrew words and phrases by which the teaching is conveyed.

SECTION III SCIENTIFIC EXPLANATION

ACCEPTING these facts of Divine Revelation as to man's origin, we may ask what has Science to say in explanation of the way in which the facts were wrought.

It may be stated that it is acknowledged by many competent to speak, that Science gives no answer as to the mode of man's origin. How he came to be is veiled in deepest mystery. The theory of Evolution is confessedly incompetent as applied to man. It has as yet failed to trace and account for the descent of man, whatever it may be able to do in the future. The name of "Evolution," if it be an exposition of the essence of that which it designates, itself shows the insufficiency of the Theory, unless certain consequences be admitted which no one would allow. To "evolve" is to unfold that which is contained within. Hence by evolution nothing

Evolution misnamed

Nothing New from It

can be produced, but that which already is within. The oak is within the acorn, and may be evolved from it, but a pine tree, hyacinth, rose cannot be; because these are not within the acorn. From an eagle's egg an eagle may be evolved, for it is within it; but a vulture, a dove, a robin, a lizard, a lion cannot be; for these are not within such egg. From various seeds a corresponding variety of plants may be evolved for these are within them, but fishes, birds and beasts cannot be; for these are not within them. From nebulae diffused in space, stars, planets, worlds such as ours may be evolved for they are within them; but things possessed of organic life can not be, for these are not in them. Spontaneous generation has been disproved. A man may be evolved from an embryonic, or unborn child, for he is within such child. Such child is a real human being. It of necessity follows from this, that man cannot be evolved from an ape-like beast, unless he be within such beast. Such beast must be as truly a human being as is a man-child about to be born into the world. And the same thing is true in regard to all the lower and inferior forms of animal life, from which the ape-like creature is said to have been evolved. Each one must have been truly a human being, or man could never have been evolved from them. A Shakespeare, a Newton, a Daniel Webster, or an Agassiz, if one human soul could arise from another, might be evolved from the most uncouth and repulsive savage, for such an one is truly a human being, but not from an ape-like creature, or a lemur. This is the inevitable consequence of evolution; we must, if we accept it, acknowledge *each individual* in the long line of our animal ancestry as a *true man*, endowed with all his powers,

Moreover, as Evolution thus requires that the thing evolved be already within that which evolves it, the

origin of man is by this theory simply assumed, with no explanation whatever. The assumption is that a germ of life in the remotest past appeared, containing within itself all forms of life, including man; and containing these has unfolded them; unfolded that which was from the beginning.

Yet it is a remarkable fact that the theory of Evolution is the best that Science can do, and the one only answer which it has ever given in explanation of the mode of man's creation. This then is the present state of the case. We accept the assured fact that God created man in His own image, and receive from science the best answer, which it is able to give as to the mode of the divine creation, the confessedly incomplete and evidently impossible theory of Evolution; impossible because the beast cannot evolve the human, because it does not contain it within itself. There is no conflict between this and the facts of divine Revelation; science simply fails to explain the mode of man's creation. The answer which it gives we may accept provisionally as the best which science can give at present, and as, perhaps, being of such a character, that it may become both possible and true, when modified, and made complete by the addition of that which is wanting.

The needed modification and the supply of that which is wanting may be given in the following way.

New Scientific Theory

There must be the definite recognition of an intelligent Creator as an assured and necessary scientific truth; that from Him all life proceeds; that the whole scheme of life from the first germs in the remote past to the complex and varied forms of the present, including man, with its progress through successive stages is His design, and His plan of working, that He operates through

New Theory

Assured Truths

secondary causes, except when, to introduce that which is *new*, He acts by His own immediate power.

There must be the recognition, as an established and necessary scientific truth, of the material and immaterial, or spiritual, as two substances, or entities, each with its own peculiar properties; that the latter cannot spring forth from the former; and that organic animal life is essentially the vital union of the material and immaterial, or spiritual.

There must also be the recognition, that the immaterial element is the formative, determining, directing factor; the unifying organizer of the physico-chemical forces, so that because of it the organism is what it is. Thus man's body is a human, not an animal body, because the human spirit is such a factor within it, building up the organism and determining its character. So also the lion's body is lionine by reason of the lion's spirit as the formative factor within it, and so all forms of animal life are due in like manner to the varied immaterial elements within the organisms. Here it must be insisted upon that this is not supernatural, nor mystic; it is not a makeshift to eke out the material potencies; it is not the introduction of any capricious disturbance in the common course of nature, nor of any thing that perturbs its direct activities, but is strictly, thoroughly scientific.

It is an *essential* and *fundamental truth* of science, that there are two substances, or entities, the material and the spiritual. To deny this is to introduce agnosticism, infidelity, atheism, *it is subversive of all truth*. The acknowledgment of both these substances, or entities is universal and necessary. It is an utterly mistaken notion, that we know the material better and more assuredly than we know the spiritual. In point of fact our knowledge of the latter is the prior and the superior.

Men are more assured of the "Ego" than they are of the "non-ego;" of the inner self, which thinks and knows than of the outer not-self of which they take cognizance. They know that the "Self" is as real a substance as is that which constitutes the external world of matter. We know substance only by its qualities, its properties and activities, its manifestations; and the qualities, properties, activities of the inner self are as clear, definite, assured as are those of the external world. And we know certainly, that the two sets of qualities cannot inhere in the same substance, because they are contrary, or opposite to one another; what the one is the other is not. This is the truth men *live*. The denial of these two substances is a simple impossibility, a mere form of words, utterly cast aside in ordinary practical life.

Moreover, we know that as these substances are the opposite, or contrary of one another, the material cannot evolve, or give rise to, or call into being the spiritual.

It is also an assured fact that animal life consists in the vital union of the two substances. We know that this is so in the case of man, and we have precisely the same kind and strength of evidence, that this is so in the case of animals. We affirm of the man, that within his material body there is an indwelling spirit, because he has the properties of a spirit; he perceives, thinks, feels and wills; and we make the same affirmation of the animal, and for the same reason. If man has a spirit in vital union with his body, so has the animal, for the animal has sensation, perception, thought, emotion, will, free-agency. These are spiritual attributes and cannot belong to that which is material; and hence any theory of life which denies, or ignores them, must be unscientific and incompetent. The origin and the successive stages of advancement of the inner, spiritual entity must be accounted for, equally with those of the outer organisms.

The Spiritual the Dominant Factor,

It is also a scientific fact that the vital union of the spiritual with the material in the animal is of great potency. The two entities act and react upon one another in the most marked manner, and unless it can be proved otherwise, it must be assumed that the spiritual is the superior, as indeed we know it to be, and the dominant factor; the formative, unifying principle, directing the physico-chemical forces and determining the character of the organism, each animal spirit thus constructing its own peculiar organic body.

All the foregoing, together with the being of an intelligent Creator, being assured facts, to be scientific we must necessarily introduce them in any theory which would account for animal and human life, its origin and progress; and such introduction, instead of being a makeshift to eke out material potencies, and the bringing in of a disturbance in the common course of nature, and an interference with its direct activities, is the recognition of essential, component parts in the common course of nature, and the explanation of the natural potencies and activities within it; the true state of the case being, there is the *spiritual* element in Nature, and it is the *dominating* factor,

There is another fact which must be definitely recognized, though it will be vigorously combated by many. It has above been mentioned that the material cannot evolve, give rise to, nor bring into being the spiritual substance, or entity. It is also true that, so far as we have any knowledge of the spiritual, each spiritual substance is a separate, indivisible *Entity*, from its origin complete in itself, without food supply and without need of it, or capacity for it, and incapable of augmentation, or growth of its substance or of its attributes, except in the way of their development. Hence from its very nature incapable of evolving, or giving rise to other

and a New Being by Act of Creator

spiritual entities, or of arising itself from such. This will be more easily recognized if we consider it in its highest form, that of man. The human spirit we call a person, and cannot think of it as being divisible, augmenting in substance, or arising from, or giving rise to another person. Each spiritual entity, as it comes into existence, seems to be a new being; and hence it must be referred to a creating act of the divine Creator. In this respect it differs from the mere material *structure*, or body, which we recognize as built up out of already existing material elements, into which it may and does readily return, as it disintegrates. For a spirit to die would be its passing entirely out of existence, its total annihilation both of substance and attributes.

It will be noted that we are dealing with known facts and in a strictly scientific way, and if it seem objectionable and unsatisfactory, it should at least be accepted as the presentation of our present state of knowledge. The known facts are that there is a spiritual entity in vital union with the material organism, and its essential nature, as far as we know, is that it is a complete indivisible unit incapable of augmentation, or growth, it cannot arise from matter, nor from any pre-existing spirit, or spiritual substance. There can be no such substance; spirit exists only in individual entities; it is a *new being* in each case, and *scientifically* it must be referred to the creative act of God. The mode of His creation we know not, no more than we know the mode of His creation of the first germs of organic life. It is simply an act of divine power, mysterious, inscrutable.

It is a strong confirmation of that, which we have presented, that it supplies a deficiency in the Theory of Evolution, or rather explains that which evolution signally fails to do.

It, and it alone, explains why variations occur; why

Explains that which Evolution cannot

variations are what they are; why they are ever in the direction of a higher type, a progress toward a far off goal; why through the geologic ages there is, at times, the sudden appearing and development in highest perfection and in gigantic size of new forms, or types followed by a decline and survival in smaller and degenerate forms; and why it is that the superior can *seem* to spring from the inferior, or *seem* to be "evolved" out of that which *does not contain them*.

Taking the foregoing facts, and combining them with the teaching of "evolution," that there is an unbroken continuity of organic life from the first germs, in the remote past to the varied forms of the present, we present the following theory of life.

The Creator having brought the earth into a state fit for organic life, and having determined the stages, through which it was to pass and form a fit environment for successive, advanced types of life from age to age, created the first germs of life and endowed them with all their peculiar properties, including growth, reproduction, variation and heredity. In the case of the animal germ, He created and vitally united to it the spiritual entity, as the dominant and formative factor. These organic beings grew and multiplied, each new individual organism being furnished with the spiritual entity by divine creative act. As the ages rolled by, there appeared variations more in accord with prevailing environments, and in the direction of advanced types; these new forms succeeded one another by less or greater steps of progress, and were due to the within formative and dominant factor, the spiritual entities. A new creation in each individual, these spiritual entities as they followed one another, were created in improved, or advanced forms, and they moulded accordingly the organisms, with which they were in vital union.

Variations due to New Spiritual Entities

Varied organisms, therefore, occurred not by accident, nor by spontaneity, but because of a change in the indwelling spiritual entity; and these survived because they were the fittest, or more in harmony with the then environment, *made for them* and *they for it*. The new types, thus brought in, succeeded one another by gradual steps, forming, as it were, links in an unbroken chain; but at times, as the geological record seems to intimate was the case more or less frequently, the change was more decided, the old type gave birth to a new type very far in advance of itself, so that between parent and offspring there was a wide gulf of separation, because the new spiritual entity within the new organism was of this advanced character, and moulded the organism accordingly. The chain, *not of organic descent*, but of gradual advancement is broken; there are one, or more, perhaps many, missing links, these can never be found, because they never were. In such a case we evidently see, what indeed is true of all cases of real advancement, that the higher is not evolved from the lower; it is born of it, but there is the *introduction* of that which is *new*, a spiritual entity of a higher order has been made and brought in, and it has moulded its own peculiar, and advanced organic body.

In the process of the ages the mammals appeared, and these one after another in advanced forms by continuity of organic life and by the introduction of new and advanced spiritual entities, each moulding its own body. Stage by stage the unbroken progress went on till the anthropoids appeared. From a suitable one from among these Man was born, because a new and far advanced spiritual being, one of a new order, bearing the image and likeness of God was created and vitally united to the embryonic organism which grew and developed under its dominant and formative force, by which it was made not

The Perfect Man Born

an animal, but *a truly human body*, in ideal perfection, than which nothing more beautiful has ever since appeared. The indwelling Spirit fashioned its own body, and *Man was born in the complete fulness of human nature*, with *as wide a gulf of separation* between himself and the animal, as there is at present. There was an unbroken continuity of organic life, but a broken chain in gradual progressive advancement of life—many links missing—a great and sudden hiatus. These links never *were*, and hence can never be found. The animal from which the first man was born was man-like, but still thoroughly animal, in no sense human; her offspring thoroughly, perfectly human, in no sense animal. There was no creature intermediate between animals and man, neither animal, nor man, and gradually merging into man; man was not evolved from the animal. He was a new created Spirit, constructing his own body within the animal parent and born of her. She was both before and after the birth but the nursing mother; and no more the origin of Man born of her, than was the wolf, which old historians said nurtured Romulus and Remus, the parent of these.

The barbarous races of geologic, prehistoric and historic times down to the present are degenerates, remaining stationary in their degradation, or even retrograding still further, except only as influences of a higher civilization, and revealed Religion, are brought to bear upon them *ab extra*.

Such is assuredly the case with the barbarous tribes of the whole historic world. Peoples have degenerated, civilizations have declined and passed away, but no uncivilized peoples have ever advanced without contact with the higher.

The *only* hope for mankind was in *an unbroken line* of civilization and revealed religion from the first parents

of the race; as a river of shining light flowing from its primeval source through the world and now outspreading itself everywhere, for the enlightenment and elevation of all.

This Theory is strictly scientific. If it be objected, that the direct act of the Creator is too much introduced, it must be noted that this is the *only way possible* to account for the origin of a *new entity*. To the First Cause must be referred the nebulous vapor from which suns and planets have been evolved. To the same Cause must be referred the first germs of organic life and with equal necessity to the same cause must be referred the spiritual entity vitally united with the animal organism. And if, of the spiritual entities, each individual be a *new* entity, they must all be referred to the same Cause, acting throughout the ages; and even if, in the future it be found, which we do not think possible, nor conceivable, that the individual spiritual entities may arise from some kind of spiritual parentage, it would still be true, that each *new and advanced* order of spiritual being must originate by the act of the Creator; the inferior cannot evolve the greater.

It must, moreover, be noted that there is arising a marked tendency within modern Science towards the doctrine of the *Divine Immanence*—the thought of an *ever present, actively-at-work* Creator. This makes deepest impression upon my mind. My delight is to contemplate the growth and blooming of the beautiful flower, seeing it unfold its exquisitely wrought, delicate form beneath the fashioning touch of the invisible, but present, wonder-working God.

And even by the atheist, and by those who erroneously maintain that science is neutral, neither theistic, nor atheistic, this Theory may be accepted. They assume the origin of the first germs of organic life; equally well

Two Statements

The True Form

may they *assume* the origin of the spiritual entities, and with these vitally united with the animal organisms, as the formative and dominant factor within them, they have a form of the theory suited to *their way* of thinking.—“The unbroken continuity of life from the first germs to all forms of life at present, including man, *not by evolution*, but by successive stages of advancement, each successive stage due, in fact and in character, to the advancing improvement of the spiritual entities within the animal organisms; the improved spiritual entities being each a *new introduction in the same sense, and equally with the introduction of the first organic germs*. The theory, thus modified, recognizes, *as must necessarily be done*, the spiritual entity and its vital union with the organism; and by the introduction, even though unaccounted for, of the new and improved spiritual entities, is free from the absurd and impossible assumption, that the higher can be evolved from the lower. The theory, however, in this form is imperfect and unsatisfactory, because it does not trace life far enough back, and does not account for the introduction of the new elements, but simply assumes them. It is, moreover, unscientific, because it denies, or ignores the *fundamental scientific truth and principle*—all things must be due to a sufficient first cause, which is the intelligent Creator, whose design the whole scheme of life is, and by whom it is all bound together as a unit, with beginning, progressive advancement and final completion.

The *Theory in its true scientific form* is theistic, and may thus be stated. “The unbroken continuity of organic life from the first organic germs to all forms of life at present, including man, not by evolution, nor development; but by successive stages of advancement, due to the formative and dominant force of the advancing spiritual entities in vital union with the organisms:

New Theory not Evolution

the first organic germs, and every individual spiritual entity, with every new grade of spiritual advancement, being the introduction of something new *ab extra*; the whole scheme of life, as a unit and to the most minute detail, being the design and plan of the divine Creator, wrought out by the Creator through secondary causes, including the free agency of man and animals, and *by the acts of His own creating power, introducing all that is new.*

It will be noted, that this Theory is not evolution in the proper sense of the term, but a decided improvement, as evolution, except within a limited sphere, is an impossibility, unless the term be taken in a sense far from exact. "To evolve" is defined to unroll, unfold, disclose, to open itself, to disclose itself. Worcester's Dictionary. Hence nothing can be evolved, but that which is within that which evolves; is within that which unfolds, opens itself, discloses itself; all real advancement is thus precluded. If man is evolved from the original germs of life in the remotest past, the *fulness of manhood* must have been in the primitive germs, and in each link in the long unbroken chain of life, as truly and as fully as in the new born human infant. *Each creature* in the long series of generations must have been a *man* in the process of unfolding and disclosing himself.

Within *limited* spheres there may be true evolution. From the embryonic germ of human parentage, endowed with its indwelling spirit, the infant may evolve; from the germinal vesicle within the hen's egg the chicken may evolve; from that within an eagle's egg the eagle; from the first human pair the various races of mankind may, perhaps, evolve,—from the wild rock pigeon, perhaps, the varied breeds of domestic pigeons may evolve, provided all these forms are already within the original, and require the introduction of nothing new.

So-called Evolution

We may, however, take the term "Evolution" in a lax and extended meaning, as is often done. In this sense the evolution of different things is spoken of, for example, the evolution of the flour mill, from the rude breaking of the grain by pounding to the complicated steam-driven mechanism of the present day; or the evolution of steam railway traveling and transportation. We may take the so-called evolution of the chronometer, and find in it a good illustration of the theory of life, which we have presented. The marvellous, delicate, accurately constructed, and adjusted chronometer has been, as is said, "evolved" from the rude modes of time keeping in remote ages past. The sun-dial, hour-glass, clepsydra, or water-clock, the first rude attempts at time keeping mechanism have "evolved" the modern chronometer, but note the *manner* of such so-called evolution. The first rude time-keepers were made *ab extra* by an intelligent maker; he saw deficiencies and introduced some slight improvement; he noted the imperfection of this and again invented and introduced improvement; and thus on and on, ever noting what was needed, and continually introducing something *new*, thus advancing the mechanism step by step till the modern chronometer was perfected. In such evolution as this the lower forms do not contain the higher, and do not evolve them; they are entirely without such power. The improvements all came *ab extra*, and the "evolution" is simply successive stages of progressive advancement due to an outside intelligent maker. This is a good illustration, though not a complete presentation, of the kind of "evolution," there is in organic life. In the latter there is something more, namely, the unbroken continuity of organic life, and the automatic activities within it; but the *origin* of the life and *all the advancement* come from an outside intelligent Creator.

The Word Rejected

Male and Female

It would be better to discard the term "Evolution," as erroneous and inapplicable and describe the new, modified Theory, as that of UNBROKEN CONTINUITY OF LIFE, THROUGH STAGES OF ADVANCEMENT AB-EXTRA.

We might here leave the Theory which we have given, were it not for two additional facts mentioned by divine Revelation, that God made man male and female, and that, as to the origin of woman, she was taken out of man.

Male and Female.

In regard to the first of these; it is a well known fact that there are male and female characteristics of the soul; this is as assured as that there are these characteristics of the body. This distinction, however, is not thorough-going, as though the masculine and the feminine souls were each entirely without the characteristics of the other. In reality both have all the elements of human nature, the distinction of male and female being only one of different development and activity of the various spiritual attributes in the two cases. The masculine soul has certain attributes prominently brought forward as characteristic of it, while the feminine soul is characterized by the prominence within it of those, which are comparatively subordinate within the masculine. Hence it is, that we often find men who are decidedly feminine in their spiritual traits, and woman who are very masculine.

And as the soul in vital union with the embryonic organism is the formative and dominant factor, it fashions it male or female, according as it is itself the one, or the other. We would present this as the true answer to the disputed question of the determination of sex. The father generates the embryonic germ, having in himself all the spiritual and physical attributes of human nature, the generated germ is both male and female. This new

Origin of Woman

paternal germ, being conceived by the mother, as it grows and develops within her, becomes male *or* female, according as the new spiritual entity, vitally united to it as its formative and dominant factor, is itself the one, or the other, made such by the creative act which gave it its being, and develops within the germ, which is both male and female, its own appropriate set of organs, as it fashions its own body.

The first human being was created with *all* the attributes, spiritual and physical, of human nature, which fully developed within him; the second human being was created with *all* these attributes likewise, but with the constitutional development and activity of those, which are the characteristics of woman. With her presence and companionship, the man, in maturing, became the more manly, and from thenceforward there was the marked division of mankind, as male and female, both as to soul and body. Humanity in its fulness and perfection is in neither the one, nor the other, but in the blending of man and woman together in the union and fellowship of the two, "a two in one and one in two," without which the highest human love, companionship and advancement would have been impossible and unknown.

The Origin of Woman.

The *second* fact is, as to the origin of woman, that "she was taken out of man." This being the known fact, it may be asked, is there any scientific suggestion, which may be made as to the mode in which this was done? The answer is that she was born of the first human being, who at the outset had in full development all the organs of complete human nature. Being such an one, woman could readily have been produced within and born of him. After her birth the one set of organs became atrophied in the first human being and from

Born of Man

henceforth the two have been developed in separate individuals. This would seem to be a very natural way of understanding the expression "and took one of his ribs and closed up the flesh instead thereof, and of the rib made he woman," "she was taken out of man." The rib is named to show that woman came not from head, or limbs, but from the body and out of the substance of man, "bone of his bone and flesh of his flesh;" and the place was closed up, that is, that which formed the woman was removed, the organs were atrophied. It is an established fact, that at the outset the two sets of organs are within the embryo, and the individual becomes male, or female according as the one or the other is developed, and that in mature life both are present in every individual, the one set developed and the other rudimental. The fact, therefore, is that every human being is, in some measure throughout life, such as we have suggested the first man was.

Moreover, there is an important reason why this should have been the origin of woman. The first man, having been made in the manner above mentioned with the gulf of separation between him and animals, it was needful that there should be no admixture of man with the animal in the reproduction of mankind. The new human race was altogether self-propagated; woman was born of the first man and she became "the mother of all living."

If this be the true state of the case, it is a remarkable and interesting fact, that there is a striking correspondence between the first head and representative of our race, the first Adam, and the second head and representative, the second Adam. The first gave birth to a woman; the second was born of a virgin mother.

To those who feel constrained to take the language literally it might be suggested, that *they* think of the

Figurative Language, a Veil

transformation of the rib as a miracle wrought within the man's body and the woman brought forth from him in an infantile form. This relieves some difficulty of thought and leaves the record absolutely untouched even as literally understood—woman was made out of man's rib, and was taken out of man.

It is, however, absurd to take the expression literally, and for a word or two, render the whole passage objectionable, which otherwise is most clear and reasonable. All language is figurative, and at times extremely so, in the Bible and elsewhere. Thus in the Psalms and other places—"The floods clap their hands"—"The valleys are covered with corn, they shout for joy, they also sing." It is said of God "Thou openest thy hand"—Thou "hast laid thine hand upon me." The earth is called the footstool of God's feet. His footsteps are spoken of. Christ was misunderstood when He said, "Destroy this temple and in three days I will raise it up." Nicodemus did not understand Him when He said, "Ye must be born again." Christ said, "I am the door"—"This bread is my body."—"Except ye eat my flesh and drink my blood." Those who heard Him were offended. The woman of Samaria misunderstood Christ when He said "I would have given thee living water." Christians are called, living stones—Christ the chief corner-stone. God is said to be Light. The Books of Ezekiel and Revelation are full of extremest imagery.

The only question is, what is the real meaning of the language employed? In the account of the origin of woman, as is the case in many of Christ's sayings, a veil of mystery seems purposely thrown over the thing spoken of, by the figurative language which is used; but the record is true, and by reading the entire account we may interpret its meaning. The interpretation, which we have given, is reasonable, and unfolds the facts, which we have

mentioned, and which readily admit of a satisfactory scientific explanation.

It is interesting to note that we have in Ps. 139 a description of how we all are formed, which corresponds with the account of the origin of woman, and which, having the same general topic, employs, like it, language which must be taken figuratively. "Thou hast possessed my reins; thou hast covered me in my mother's womb * * * I am fearfully and wonderfully made: * * * My substance was not hid from thee, when I was made in secret, and curiously wrought in the lowest part of the earth. Thine eyes did see my substance, yet being unperfect; and in thy book all my members were written, which in continuance were fashioned, when as yet there was none of them." The beauty and truth of this wonderful passage would be ruined, if it were treated, and abused in the manner, in which the account of the origin of woman has been.

But when we have said all that can be said from a scientific standpoint as to the origin both of man and woman, it must be distinctly borne in mind, that the facts stated in the Bible remain the same, whether the scientific theories of explaining *how* they were produced be right, or wrong; just as do the facts of nature, whatever scientific explanations is given of them.

Our Present Knowledge.

In the answer to the question as to our origin, which we have given, we have presented what may be regarded as the statement of our present knowledge concerning it. From such knowledge we have endeavored to eliminate all misconceptions, errors and confusion, and, as far as possible, gather together all that seems to be assured facts, and arrange these in such order and harmony as to form, with as little mere speculation as possible, a theory

All the Facts**Next Question**

simple, definite and reasonable; one which will readily commend itself to all, who are willing to accept the complete array of the spiritual and material facts.

This answer as to our origin is intimately connected with the question as to what we are. Indeed the knowledge which we have of our origin is, in large measure, derived from what we know ourselves to be. The answer to this second question has thus in some degree been anticipated, but it needs further unfolding and presentation.

Intuitive Perception

CHAPTER III

What are We ?

SECTION I "I AM" "I CONTINUE TO BE"

IN logical order, or the order of nature, the *first* affirmation of Consciousness may be said to be "*I am.*" Of course it is not intended that this is in any metaphysical, or philosophical form. It is the simple consciousness of being. We have an intuitive cognition that we are; we know *that we are.* This is presupposed by, or included in all knowledge, and all experience of every kind; it is the starting point and foundation of every thing else. It is absolutely positive, assured, indubitable, infallible. It is the one great reality which gives us our primary conception and assurance of all other real being. By knowing what it is in ourselves "to be," we know what it is for other persons and things to be, should there be any such persons and things. If we can doubt, or deny our own being, we can doubt, or deny the reality of all other being; but as we cannot doubt, nor deny our own real being, we cannot doubt, nor deny the possibility of other real entities. The reason why this knowledge is infallible and indubitable is because it is the seeing, the intuition, the cognizing of that which is and is present. The reality is—we know it. Our knowledge of it may be very limited, but as far as we cognize it, we know the very thing itself. To say that we know *the real thing*, and that it may not be, or may be other than we know it to be, is contradiction and absurdity.

Unbroken Continuity of Being

The *second* affirmation of Consciousness is "*I continue to be.*" Or the two may be presented as one. "I am and I continue to be." Here again we cast aside all things of a metaphysical or philosophical character. Here we have the simple consciousness of "unbroken continuity of continued being." This affirmation is just as positive, definite, assured, indubitable, infallible as the affirmation "*I am.*" We intuitively cognize that we are, that we endure, that there is no break, nor interruption in our continued being. There is an onflow, or duration of our being. Hence we have a present, a past and an ongoing to the future. We do not know how long a past we have had, we do not know how long a future may be ours. The past is not, and we can have no intuition of it; the future is not and of it likewise we can have no intuition; we cannot *see* that which is not. Yet it is an *intuitive truth*, that while we have any being ours is a past, present and future; for the intuition which we have is that of a present reality, namely ours is a duration, a continuation of being; as long as we are, we *are passing from one moment to another.* We cognize this as the essential character of our being as it now is. This is our intuition of Personal Identity.

SECTION II PERSONAL IDENTITY

THERE is no doubt that we have this Intuition. We all have the positive assurance that we who now are, are the same persons that we were in the past, and the same that we will be in the future, as long as we live. But the presentation of this assurance of Personal Identity, which is usually given is unsatisfactory and erroneous. It is really an intuitive truth, but it cannot be such if the ordinary explanation of it, taken as a whole, be correct. It is generally founded upon memory and a persuasion, a belief, or judgment, but none of these are intuitive.

Unsatisfactory Expositions

Thus it is said that we have a remembrance of a past experience of a varied and drawn out character, and that, as we recall this past, a belief, or judgment arises within us, that we are the persons who had this experience.

Thus Dugald Stewart taught "as the belief of our *present existence* necessarily accompanies every act of consciousness, so from a comparison of the sensations and thoughts of which we are *now* conscious, with those of which we recollect to have been conscious formerly, we are impressed with an irresistible conviction of our *personal identity*," again "It is by Consciousness and Memory that the sameness of our being is ascertained to ourselves," again, "Our belief of our *personal identity* presupposes * * * the exercise of memory and the idea of time." Vol. v. 59-60.

Thus Dr. McCosh writes, "But in every exercise of memory we have a remembrance of a past self. We remember the event as in past time. We remember it as an experience of self." "Having thus a past self brought up by memory, and a present under consciousness, we compare them and affirm that they are the same. This is simply the expression of the fact falling under the eye of consciousness." "Personality is the self of which we are conscious in every mental act. Personal Identity is the sameness of the conscious self as perceived at different times. The phrases do not point to some unknown essence apart from, or behind the known thing. They simply designate an essential, an abiding element of the thing known. As personality and personal identity appear, we are entitled to insist that they be brought out to view and expressed in every proper science of psychology." "We do not figure self as remaining the same; we judge, or decide the conscious self of to-day to be the same as the conscious self of yesterday remembered by us." Defence of Fundamental Truth, 91-94.

Memory and Belief

"It will be observed that here, as in every other case, the judgment throws us back on cognition, specially personality, and belief; the necessary facts on which the mind pronounces the necessary judgment are furnished in the exercise of consciousness and memory." "First and Fundamental Truths," 192.

This exposition, as thus given and as given by other recent writers, may, in some of the expressions used, border very closely upon the truth, but it is unsatisfactory, because it does not distinctly state the essential fact, apart from all that is extraneous, and irrelevant; and is erroneous because it introduces memory, comparison, belief, judgment, which cannot be included in that which is intuitive, and which are not within our primary cognition of Personal Identity.

The definite and infallible affirmation of Consciousness is "*I am and I continue to be.*" This is "Personal Identity"—*an unbroken continuity of continued being.*

Strictly speaking *Memory* has no necessary part in our assurance of Identity, in its absolutely prime simplicity. We may have no remembrance of our past self; as a matter of fact, this is, in a large measure, the actual case; we do not know how long our past has been; we have no memory of our infancy; a great part of our childhood and more matured life is hopelessly lost; it is a merest fraction of our past experience that we can recall; we have been one-third of our time unconscious in sleep; sometimes the whole life has passed into oblivion as the result of disease, or injury and the man's experience has begun entirely anew; but all this in nowise impairs the simple, definite affirmation of Personal Identity—"I am and I continue to be."

Theoretically and hypothetically, we may *imagine* a soul to have had no past, without impairing this intuition of Identity. The *instant* a soul is by creative act brought

Memory not needed

into being, it might be conceived of, *theoretically*, as having the consciousness of *this unbroken continuity of being*. As an *essential* part of the "I am" is the "I continue." With this consciousness of unbroken continuity of continued being, it matters not whether we have had a past long or short, or, as in the case imagined, none at all; it matters not whether it be wholly, or in part remembered, or altogether forgotten; the present instant may fade away into oblivion as it passes, as is the case with the vast majority of our fleeting moments, but "*I continue*." This is the testimony of Consciousness.

Into this "*Intuition*," a past self cannot enter. We can have an intuitive cognition only of our present self. What we once were, or might have been, we must learn in some other way; by records, the testimony of others, or by our own remembrance. This latter is an entirely different department and activity of the soul. We have an intuitive cognition of the remembrance, but the remembrance itself is the act of another faculty. Moreover, memory is variable, fragmentary, unreliable. Men often "positively remember" what never took place, and are surprised at their own mistaken assurances. To found our knowledge of Personal Identity upon any individual supposed remembrance may be resting it upon a mere fancy of the imagination; and if it be thus with one, why might it not be thus with all our remembrances.

In reality our knowledge that we may have had a past does not depend upon *memory*, but upon the *cognition* that ours is an onward duration of being. This gives us a past. Knowing that we may have had, or that we have had a past, we learn from memory what its character was; it pictures and paints the past. We may conclude that we *were* yesterday, or last year, because we remember that we did, or said something then, but this is an

Not from Belief nor Comparison

inference, and is upon the supposition, that the remembrance is correct, which it may not be.

When it is said that with the remembrance there arises an irresistible *Belief*, a mystery is introduced; no explanation is given of how, or why such belief arises.

When it is said, that we compare our present self with our remembrance of our past self, we not only pass away from infallible Intuition to other activities and attributes, but also introduce a twofold uncertainty; our comparison may be erroneous, and our judgment may be wrong. And as the remembrance may be, and often is a mere fictitious fancy, the judgment pronounced may be the affirmation of the identity of the present self with that which never was.

We do not, and cannot compare our present self with a past self, and declare them identical.

In fact we find them very *dissimilar*. I remember a little boy going to school, and comparing myself with him in his littleness, with his ignorance, and childish acts and delights and conduct, I find it hard to believe that he and I can possibly be the same. The memories of the past become more and more like my present self, only as they are memories of that which is less and less remote.

Of concepts, now before my mind, I cannot affirm that they are identical with a past reality, nor that *these concepts are identical with concepts, which I have had before*.

It is impossible for me to affirm, that in my boyhood I was identically such as I now think I was; the *diversity* may be of the most marked character. I remember the house where I spent my childhood, but I could not draw an accurate picture of it, nor one as accurate as that, which I might have made some years ago.

These are the characteristics of our recollections. They are continually losing in vividness, in details, in accuracy,

Gives Difference rather than Sameness

in reliability, and in regard to our confidence in them. They are, moreover, actually changing by new additions, and confusion of one with another; and, old thoughts are often mistaken for new, and new often regarded as those with which we have long been familiar.

It is, therefore, a delusion to suppose, that we can, by *comparing* our present self with anything in the past, positively affirm that they are identical. We can only affirm, with more or less confidence, or hesitancy, some degree of resemblance; and we may be, and often are altogether wrong.

By what possibility can I, upon comparing the concept which I have of a little boy, and that which I have of a man, such as I now am, affirm the identity of the two persons? There may never have been such a little boy; the particular concept, with which I am comparing myself, may be a mistake. As far as comparison and judgment are concerned, it is *difference*, not sameness, that is revealed. The judgment, as the result of the comparison is, that the remembered self is different and extremely different from the present self. If with Dr. McCosh, we affirm that we remember the concept as an experience of SELF, comparison, and judgment are precluded. Memory is every thing and all-sufficient. I simply know that, I, who now am, am the same that I was, because *Memory* assures me that the concept of the past, which it presents, is a concept of *mine own self*. Thus Personal Identity becomes a mere uncertain, fragmentary experience. Its proof is cumulative; it is derived from a series of remembrances of a more, or less doubtful character; the longer the series the greater the proof. It is not a necessary truth, and has no reference to the forgotten past, nor to the unknown future.

Whatever may be true of Memory, as an actual impression made, as Dr. McCosh seems to think, indelibly

Memory Unreliable

upon the soul, it is certainly, in its character as a *recollecting*, or recollection of the past, and as far as it is of practical use to us, most fragmentary, variable, unreliable; and Personal Identity, founded on it, would be of the same character. Those having a true, full and vivid recollection, and well under their control, would have a better assurance of Identity, than those whose recollections were meagre, weak, treacherous. Men would have no *proof* of their Identity except in regard to those isolated times, and experiences of which they have a true recollection. In mere memory there would be nothing to bind all the separate concepts brought before the mind together with the missing ones, which we do not recollect. The judgment could only be, I am, and I am the same as in such and such recollected moments; for these are the only ones with which the present self is compared. We cannot compare our present self with our infant self, and judge them identical. We cannot compare our present self with a dreamless, sleeping self, and judge them to be the same. We may compare a recollected self before sleep with our present awakened self, and judge them to be the same, but we cannot compare these with a dreamless, sleeping self, and judge their identity. Should one die, and after ten thousand years rise from the grave, with no remembrance of these years, mere memory could not assure him, that he had lived, and had remained the same person through them all. Between the present self and the self of this period, there could be no comparison, and judgment possible.

Thus it is, necessarily, in regard to all the innumerable moments of the past of which we are oblivious, and by which the few recollected moments are separated far asunder. Yet the fact is, that we are as much assured of our identity in all such times, as that we are the same in all our isolated, recollected moments. I am as sure

Something Else needed

of my identity with my Infant self, as I am of my identity with myself of the last hour.

To *affirm the identity* of the present self, with all the past, however distant and whether recollected, or entirely unrecalled, some thing is needed, which mere memory does not, and cannot furnish. This is found in the Intuitive Cognition of the true character of my very being; it is *essentially* an unbroken continuity of continued existence. A cognition of what I now am, and must necessarily be whether in past or future. A cognition which did not originate in Memory, and which is, and abides irrespective, and independently of Memory, and which presents a necessity overspreading my whole possible being; a necessity which Memory, no one word of which is infallible, cannot give, and of which it cannot be the foundation.

If it be said, that it is the *Judgment* which declares the *necessity* of Identity, the reply is, that this is the wrong thought, and the use of the wrong word. It is not Judgment, but *Cognition*. Judgment only declares that which by comparison and investigation is discovered; that which is seen, perceived, cognized *to be*. *The Cognition must come first*. We speak that which we know, we testify that, which we have seen. *If* Memory presents a necessary truth, which in fact it does not do, we do not judge, we *cognize* that it does: if our present Consciousness presents it, we *cognize* it as such. Moreover Judgment, even if the act be a judgment, cannot build necessity upon a dubious foundation, such as Memory is, and can pronounce Identity without any memory whatever.

The true statement of the case, as to Memory and Identity is—I am, and I perceive that I have certain concepts of myself, which arise within me, with which I am already more or less familiar, and which, in some

Relation of Memory and Identity

measure, go and come and remain at my call; and independently of this I am, and mine is an unbroken continuity of being. This is the wondrous truth, I, who am essentially an abiding Person, am able to recall, more or less faithfully, experiences which I have had in the past. As a priority to all else, I know, that if I have been in the past, or if I shall be in the future, it *must necessarily* be by an unbroken continuity of my being.

The a priori conception is, that amid all changes I am and must be the same. Memory speaks of changes, not of sameness. By its presentation of an endless array of vicissitudes, of almost incredible differences, of scattered fragments of experiences, separated by long periods of oblivion, it would persuade me that I am not the same that I once was; that the unremembered, unknown, hypothetical babe, in whom I have no interest, and to whose sufferings, sorrows, joys I am utterly indifferent, was another being from myself. But all this, presented by Memory, though magnified a thousand fold, cannot overthrow the a priori assurance "in past, present and future I am, and must be the same;" an assurance derived from the *cognition* of the essential character of my being.

The babe at the mother's breast, we may suppose, has no remembrance, but we must think that it has the present consciousness of continued satisfaction, comfort, pleasure. We cannot help thinking that actually the *beginning* of our consciousness is, that "I am—I continue." *I am*, but not as a flash-light; my perception of external objects, my mental states have a certain degree of continuation, and as they come and stay, and go, I myself remain with an unbroken continuity of being. This is the cognition, which I have of myself; and I am unable to think of myself as being different from this. The only conception, which I am able to have of my

Essential Nature of Self

present self, or consciousness is that of an unbroken continuity of on-going being. This conception is that of my Personal Identity. If I have a past it must be myself same self that has it. I must go back to it by an unbroken continuity of being; if I have a future I must go forward to it by an unbroken continuity of being. Here is the *possibility* of a past and a future for *myself*. Memory pictures the one, and anticipation pictures the other. So far as anticipation is well founded, I may have confidence in its future realization; so far as memory is vivid, unvarying, and its reliability tested by experience, I may have confidence in its presentation of the past; and *if true*, it is proof that I have had a past of that character.

A remembrance of *a* past self is only a picture of it. I identify it with my present self, only by the cognition of it as a concept of myself, *which has remained with me*, A Concept of myself which *I already have*, or which I, already abiding, have retained. And as I *know* that mine is an unbroken continuity of being, as I have no knowledge of myself but of mine own one, indivisible self, the old self and all possible intervening selves must be one, and the same with my present and future self. It is not by memory, that I identify myself with a future self, but by the knowledge which I have of the essential character of my present self, its unbroken continuity of continued being. So it is not by *memory*, but by this same knowledge that I identify myself with all my past. It is this which makes memory practically possible.

I have two concepts before my mind of two little boys at school. How do I know, that one is a remembrance of *myself*, and the other a present new imagination? It is because I recognize the former as a concept of a personal experience which has remained with me; it is not new, it is old, familiar, it is like, a concept which I have

Abiding Personality needed for Memory

had before. Here the *essential* element is the present consciousness of mine own continuation, and a *priori*-ness. I, an abiding one, have this old, familiar concept abiding with me. It is *familiar*, that is it is like one which I have had before.

The very effort, and act of recollecting *begin* with the consciousness of an abiding Personality. I cannot endeavor to recall a forgotten concept, without first thinking of myself as abiding, and as having had the concept; and this previous thought of myself may be long continued, if, as is often the case, I am unable to recall the concept without long continued effort. And I cannot think of the concept, when it is recalled, as like one which I have had before, without first thinking of myself as already being; as an abiding person, who before had the concept which the recalled one resembles.

This is that of which I am now conscious, there are concepts *which I already have*, in such a sense, that I perceive them simply *by directing* my consciousness to them. A painting may be hanging on the wall before me, I open my eyes and see it, I shut my eyes and it disappears; I open my eyes again, and I see it again, and thus on, and on repeatedly. The painting itself appears, and disappears, as I open and shut my eyes. So with the remembered concepts. They are in the mind, and they appear and disappear as I direct, or withdraw my mind's eye to, or from them, or as I open, or shut my mind's eye upon them.

This is the reason why I know, that the concept now before my mind is like the one which I had before. The latter has passed away, and I cannot compare the recalled concept with it and see how similar, or dissimilar they may be. I know the recollected concept is like the original only in so far as I perceive, that it is one which I see simply by directing my attention to it. Frequently

How Memories are Recognized

I am in doubt if the recollection be correct. I endeavor to determine its correctness, and to make it correct if I find it in part erroneous, simply by concentrating my attention upon it, and detecting its character; how far it is a concept, which I now have before me by simply *seeing* it. Is it one which I simply *cognize*?

This is also the reason why our memories change, and become *erroneous*, without our losing our *confidence* in them. As they fade we work upon them by thought, and imagination, restoring lost features, and adding new ones: we diminish and magnify them. It is often the case, that men have left the scenes of their childhood, and have long lived in an enlarged world, and have been surprised, and disappointed, upon returning to their childhood's home, upon finding it so different from their childish remembrance; so inferior, so contracted, so barren, so unattractive.

The changes, wrought by us in our memories, may have been done deliberately, and intentionally at some time in the past, but this we have forgotten; or, as is the general case, the alterations have been made thoughtlessly, very gradually through a long course of time; we are not aware of it, and, as we now look upon the concept, that which we see is, not the original, but the secondary one, and in it we place as much confidence as we did in the original. Hence it is, that new concepts are sometimes mistaken for old, familiar ones. They have appeared before the mind, without our noticing by what mental operation they are there. We have also seized hold of them so readily, and have accommodated ourselves to them so easily, that they seem like concepts which we already have, and which we know simply by seeing them.

The reason why we can *recognize* memories as such is, because we are conscious of our different mental attri-

The Abiding of Concepts

butes, and activities. I know when I am perceiving external objects; when I am engaged in discursive reasoning; when I am making a choice; when I am anticipating the future; when I am creating images of my imagination; and I know when I am simply directing my attention to that which is already in my mind, and *presents itself to me, or which I find by looking for it*. The former of these two are our ordinary recollections, and the latter those which we deliberately recall.

Again, even the *Abiding* of our remembered concepts can not give us our assurance of Identity. The remembrance remains with us, but not steadfastly. It comes and goes; there are long periods of complete forgetfulness, separating its different appearances; it does not remain the same; it changes, losing in vividness and in its character; it gathers to itself features, which do not really belong to the original; and oft times it will not return at my call, and at a later time appears of itself, or is irrevocably lost. How do I know that with these fluctuations in the concept itself, there may not be a corresponding fluctuation in my being? How do I know that this not only has not been, but is also impossible? It is only because I already know my own necessary, unbroken continuity; *I am mine own one living self*.

We do not hold that Memory has nothing to do with "Personal Identity" as a concept of discursive reasoning, and as a formulated Truth. It may readily be admitted, that Memory is an occasion and a prompting of *this*. We may be perfectly familiar with our real Identity without the question concerning it, being before the mind. There must be some experience, or occasion to awaken a train of thought regarding it. In the time of the large wheel Bicycle, the question was asked of a countryman on a road—have you seen a Bicycle pass this way? He replied, "I have seen nothing of that

Memory the Occasion

kind, but I saw the strangest thing in the world, a cart-wheel running away with a man." So a little girl may be asked as to her "Personal Identity," and she might say, "I never had anything like that, but I want to tell you, I am going to a party to-morrow." She did not know what "Personal Identity" was, but she knew the thing itself and expressed it. Had she been questioned thus—"Are you the same little girl that you were yesterday and will be to-morrow?" the response like a flash of light would have come, "Of course I am, what a funny question to ask, how could I be anything else?" In an instant, without hesitation, without thought, or comparison, or judgment, and with perfect confidence in the truth, and in its necessity, the answer comes to a question never proposed to her before. She knew the truth, and never had any other thought than that of "her own one living self." So with us all. Before any *question* of "Personal Identity" arises, or is presented, we are familiar with the fact of our own one living self.

We do not derive the thought, that *we abide* from the fact that we have *abiding concepts*; for in point of time memory is not our first experience of this character. Before it is the consciousness, "I am, I am"—"I live on, and on." We do not derive necessity and unbroken continuity from abiding concepts; for our memories are interrupted, fluctuating, uncertain, perishable. We do not know that the concept of our earliest recollection, nor that of any has *abided*. We only know, that it is in the mind *now*, and that it was in the mind at various times during past years. That this is by an *abiding* of the concept is a thought derived from the idea which we have of our own living self.

This is the Genesis of the *idea of abiding*, which we have. I cognize, that I am and continue,—that I continue with unbroken continuity; this is that, *which my*

Genesis of Abiding

continued being is. From this, as a starting point. I cognize an external object, and *as long as I look at it*, it continues with the same kind of continuation. I cognize the present states of my mind, and perceive something of the same kind of continuity in them. As they appear, they have some degree of unbroken continuation, as long as I look at them. As I cognize certain concepts as memories, that is as concepts, which are now in mind and have been repeatedly in mind before, they have *as now in mind* unbroken continuity, such as I have, as long as I hold them in mind, or *as long as I look at them*. It is my continued looking at them, which gives them continuation to my thought. This is all the present continuation which they have; they vanish when I turn my attention from them. But I cognize them as being and continuing independently of any *creating* act of mine. *I simply cognize their presence.* And I have done this at intervals in the past, and I can do it now intermittingly at pleasure. As I look at them again and again they are present; as I do not create them, the only way in which I can account for this their presence with me at successive times in the past and now, is that in some way they *abide* with me. I attribute to them, just as I do to external objects, the familiar unbroken abiding which I myself *have*. In no other way can I bridge over the intervals of oblivion. I have no conception of intermittent being, such as these recollections seem to have, and which metaphysicians, in some measure, intimate when they speak of them as *reproductions*.

The erroneous claim has been made that *Remembrance* is itself the proof of Identity, because there must be an Identical Self which remembers. But this Remembrance is certainly not an infallible intuition, which Identity is. It is not an act of immediate cognition, but of retention and reproduction; and is treacherous; the tricks of

Identity not from Remembering

memory are proverbial. I sit at a table alone, I remember to have been there in the past with two men, I expect to sit there with two friends to-morrow. I have three concepts before my mind—that of myself alone, an intuitive cognition of a present reality—a remembrance of the past—and an anticipation of the future. The anticipation does not prove the future; the remembrance does not prove the past, as it may be erroneous. The concept of “myself alone” differs essentially from the others; it is indubitable, infallibly true; the others are more or less doubtful. Even if the remembrance be actually correct, we have no positive assurance that such is its character. There is nothing in the remembrance itself, nor in our contemplation of it, to guarantee its truth. We by looking at them, can not distinguish *certainly* between two different concepts, which appear before the mind as recollections, one of which is true and the other false, and determine which is the true, and which is the false. That which presents itself as a recollection always wears the guise of truth.

Moreover, to present Remembrance as proof of Identity is to reverse the logical, natural and practical order. There must first be a past self to be remembered, and an abiding Identical Self to remember. This is not so, for I must first know myself as an abiding self, before I can, at least, recognize a concept as a remembrance. All that we have already said of Identity shows this. The *I* is always the first. I know that I am and that *I* have a concept which is already familiar to me. *It is one which I myself have had before.* As it disappears, I, the abiding one, recall it. And I am aware that, independently of such concept, I, my own self-same self abide. Without the antecedent thought of mine own abiding self I cannot think of a concept as one with which I am already familiar; as one which I have had before.

The Prior Assurance

Again the real question would be, do I *remember*, is my remembrance a remembrance? To assume that it is, and present it as proof of Identity, is simply to assume the latter. What proof have I, that my remembrance *is* a remembrance? Mysterious concepts have arisen in my mind of myself as being in a different sphere, or world than this. Are these a remembrance of a pre-existence, or are they imaginations? How can I tell? Being *positively sure, as in fact I am*, that I have had, and could have had no pre-existence, I regard them as imaginations. So with the ordinary concepts which we call memories, I must have something to enable me to recognize them as such; to determine whether they *are* memories, or products of my own mind. Men have been known to claim a memory of that which was before their birth, and have only been convinced of their mistake by proof from recorded dates. In the supposed case of the three concepts of myself seated at a table, I must have something to warrant me to regard the anticipation as a *possibility*, and the remembrance as a recollection of a *past reality*. This is found in the prior assurance, I am an abiding Person. Being such, I recognize certain concepts of myself as possible for me to realize in the future, and certain concepts of myself as *retained* by myself.

Moreover, mere memory cannot be the origin, nor the proof of Identity; because it is *inadequate*. It does not cover the whole ground. At best, Memory could only give the identification of our present self with a few isolated, far separated fragments of a past experience of self.

It tells me nothing of the vast oblivion overspreading the past; what rising and falling and metamorphoses, or permanence of being may have been therein, nor how far these may be characteristic of the future. The assurance

A Far-Reaching One

which I have of my Personal Identity is a far-reaching one. It binds all my being in one united whole, one indivisible unit. I am the same Person that I was in the months before birth, throughout my entire Infancy, and early childhood, throughout all my maturing life to the present hour, through all the vicissitudes of the present, in all remembered moments, through the times of sleep and periods of which no trace of memory remains, I am the same now that I shall be throughout all the future, while I have any being, through my entire life here, be it long or short, through the mysteries of the disembodied state, prolonged perhaps through many thousands of years, and through all the countless ages of the life hereafter, if Resurrection and Immortality be my portion. This assurance, infallible and indubitable, comes to me from one single, simple, Intuitive Cognition of the essential character of my present Being.—*I am, I continue.*—Mine is an unbroken continuity of being. It is this Intuitive Cognition, which alone can, and does make memory, and anticipation possible, which can, and does enable me to know them as such. It is this Intuitive Cognition alone, which can, and does bind all the forgotten, and all the remembered past, the present and the mysterious possibilities of the boundless, unknown future into the unity of the *One Person*, I MYSELF.

Whatever individual errors or flaws may be discovered in what we have said, it must, taken as a whole, be regarded as conclusive. Memory, experience, comparison, belief, judgment have no part in our primary assurance of Personal Identity. It is by this Intuitive Cognition of the essential character of our present being that we know that we are and must ever be the same.

And even if all the arguments which we have endeavored to present be cast aside as useless, the testimony of Universal Consciousness cannot be denied. All men

The New Psychology

know, with a knowledge which cannot be shaken, that in the future, as in the past, they must be one and the same. This *is* the Intuitive Cognition of Personal Identity. This knowledge comes to all men alike. That they must be the same, *they know because they know*, at once, without argument, or proof, or reasoning; without experience or memory.

We do not deny that the ordinary Expositions are correct in many of their expressions. But we present our Exposition as, unlike them, the positive, simple, definite, clear statement, without anything to confuse or detract from it, and without the introduction of anything irrelevant, that our Personal Identity is a pure Intuitive Cognition of the unbroken continuity of our being, as its essential character. A simple Cognition which, without any subtilties of thought, is readily apprehended by all as infallibly true.

There is another way of explaining Personal Identity, that of the New Psychology. Thus, for example, Dr. C. Van Norden says: "There are certain objective necessities, learned by experience, that have come to sway thought in a formal way, much as if originally subjective. * * * In this class of intuitions probably belong personal identity and personal unity. That I am myself at all times and in all places and that I am one person—these seeming necessary postulates are no doubt results of long human experience and reflection—facts discerned by the race, but born as necessary forms of thought in the individual." This cannot be true. Consciousness expressly denies it, and it is contrary to the very nature of Consciousness as "the cognition of that which is."

SECTION III DOUBLE PERSONALTY, SUB-CONSCIOUSNESS

There is another doctrine, which seems to be growing in favor, but which is also to be rejected as untrue. It

The Facts Rare and Harmful

is that of a double Personality, or twofold Consciousness, and Sub-Conscious activity, founded in large measure upon experiments in hypnotism, etc.

The real facts are not to be called in question. We accept them, in so far as properly stated, and authenticated. The only question regarding them is as to their presentation and proof. We do not throw doubt upon the well established facts, however strange they may be, but we deny the inference, or theory drawn from them.

The facts themselves are extremely rare, immeasurably more so than are the ordinary diseases among men. So rare that the multitudes have no knowledge of them whatever. This extreme rarity goes to show that they are abnormal, unnatural, a disorder, a sickness, a disease. This is confirmed by the character and attendant circumstances of the facts themselves. The experiences seem to border almost upon the miraculous, or supernatural, and their practice is harmful and mischievous to the body, and soul both of the patient and practitioner. It produces within both of these exhaustion of the physical, and spiritual vital energies, and in various ways may lead to most disastrous consequences, notwithstanding the fact that they may be used to effect most excellent and desirable results. In this, however, they but correspond with other therapeutic agents, as morphine, arsenic, numerous poisons, chloroform, and even the mutilation, and dismemberment of the human body, which in proper hands is skillful surgery. Moreover, like all medicines and surgery, they are of value only in cases and times of sickness, and injury, mental aberration. and for scientific inquiry. Otherwise, they should be altogether cast aside. Needlessly indulging in such things, we cannot live healthy, normal, noble lives; we cannot be our own true, and best selves, with a well founded prospect of long life and activity, no more than if we spent most of

Explanations**1 Soul and Body**

our time in sleep. With this they are near of kin. This, together with that which we have been stating, indicates one of the two elements in that, which is probably the true explanation of the facts in question, both of which are, however, deep-seated mysteries of our being. The one is the vital union of soul and body, and the other the direct power of one mind, or spirit, over another. We can doubt neither the one, nor the other of these.

The soul and body exert a powerful influence upon one another. A certain state, or condition of the one is accompanied by a corresponding state, or condition of the other. When the body is awake, we have the awake-activity of the soul. When the body is asleep, we have the ordinary quiet, restful state of the soul, which corresponds thereto. If the body during sleep has discomfort, or disturbance from too great heat, or cold, hardness of bed, cramped position, ill-ventilation, sickness, etc., there is a corresponding state of the soul, with dreams, nightmare, talking in sleep, out-cries, somnambulism, and even long recitations of prose and poetry. Disease and fever produce delirium of all degrees, from the mildest to that of the most extreme character. Alcoholism results in talkativeness, and the outpouring of the inmost thoughts, and feelings, all kinds of violent and cruel deeds, otherwise impossible for the man, and the delusion and horrors of delirium-tremens. Disease, physical debility and decline produce forgetfulness, various aberrations of the mental, voluntary, and moral powers, lunacy, second-childhood, senility. And, on the other hand, the approach of death is sometimes characterized by extraordinary spiritual exaltation, and rapturous visions of things unseen by others.

Again there is a peculiar semi-sleep condition of the body, with its accompanying disregard of surroundings and the fascinating delight of day-dreams; and still further

Peculiar Conditions

there are deranged conditions of the body, produced by opium and hasheesh, which result in the wonderful imagery, revealed by those who have known them. Moreover, there are long periods of unconsciousness produced by accidents, by pressure upon the brain, chloroform, paralysis, also peculiar conditions, in which the only indications of life are pulse, breath, and warmth, and during which the soul is in a trance, which is afterwards described. Then, too, there are certain depressed, and oppressed states of the body in which it goes without food, or drink, and seems indifferent to heat and cold and harm, and during which the soul is all absorbed with profound thoughts and emotions.

All these extraordinary, and wonderful spiritual phenomena are due to the vital union of body and soul, and the mysterious power of the former over the latter ; and are the result, or, at least, are accompanied by peculiar, or abnormal, unnatural, disturbed, or actually diseased bodily conditions.

The phenomena of hypnotism in all probability belong to these phenomena. They are bound together with them by points of resemblance. The hypnotic state is often spoken of as a sleep, and a trance into which one falls, or is put, and from which one awakens ; and, moreover, like the striking ones, which we have described, it is always in connection with some peculiar, abnormal, or more or less diseased bodily condition. There is need of a certain condition, or temperament of the body on the part of the medium ; some temperaments being exceedingly favorable, and predisposing, and some altogether unfit. And the same is the case in regard to the patient operated upon ; some, because of bodily temperament, may be easily and quickly hypnotized ; and others only with difficulty and with much longer continued effort, and work. And the same persons are at times in

Sub-Consciousness Materialistic

far better condition for the experience than at other times, according to their physical condition. With these facts before us, and with the long list of striking spiritual phenomena produced by, or dependent upon the peculiar condition of the body, we *must* refer the phenomena of hypnotism, etc., to the vital union of the body and soul, and to the more, or less abnormal, or diseased bodily affections. We certainly *must* do this, rather than make the extraordinary supposition of a double Personality, or double Consciousness, or a sub-conscious activity, all of which are inconceivable, and directly opposed to the positive testimony of Consciousness as to *Personal Unity*.

As to a "*Sub-Consciousness*," the great objection, in addition to being inconceivable and opposed to the unity of our spiritual being as intuitively known, is that it seems to be in large measure materialistic. The activities so designated are apparently performed by certain nerve centres, once the seat of consciousness, but from which consciousness has withdrawn in whole or in part. The idea is closely allied to the doctrine that thought is the product of nerve, or brain activity and work. Moreover, the supposition of sub-conscious activity is unnecessary when we bear in mind known facts. The great body of all our conscious acts immediately pass into complete oblivion; we even deliberately do a thing and have no remembrance of it the next moment; our spiritual operations have the rapidity of lightning, "quick as thought" is proverbial; men saved from imminent death, have told how they have seen, as by an instant flash, their entire past life; women, even more than men, take in a situation of complex and difficult affairs and come to a wise and true conclusion in a moment, and the greater the rapidity the less is the memory of the act. It is also known that the more habitual an act becomes, the less is

Rapid Thought

Inattention

it remembered. Every word spoken is an intelligent, voluntary act, yet we cannot recall them. A young girl will pour forth a volume of words with astounding rapidity and accuracy, beautifully-expressed English, but is utterly unable to repeat them the moment they have been uttered. With pen in hand we may write, with fast vibrating motions, our own uprising thoughts, or from the printed page before us; every stroke of the pen is the result of a complicated mental operation, as to the individual acts of which we are profoundly heedless. We perceive the printing, discern the thought, select the corresponding written characters, direct the muscles of arm and hand in forming them with pen, which we resupply with ink as we perceive it needs it; and so correctly is all this done, that the written words are a perfect reproduction of the printed. So little attention is given to the acts performed, that they make no impression upon us. The greater the attention, the more clear and prolonged is our consciousness. It is by giving strict attention that we impress things upon our memory. *With no attention all is oblivious.*

There are great departments of our being, to which at times we give no attention, and of which we are then forgetful. But we recall them by directing our attention to them. This is the case with Memory. We have stores of knowledge of history, geography, astronomy, etc., but we do not think of them at all times. We become conscious of them by attention.

With these striking facts at hand, the rapidity of our thoughts, so rapid oft-times that like the wings of the humming bird, we perceive them not—the irrevocable oblivion into which the vast majority of our acts are continually falling,—the need of attention to retain any of them—the recovery of great stores of knowledge and of forgotten past acts by attention directed to them—in

Unneeded

these facts we have abundant explanation of the so called sub-conscious activities, without referring them to the automatic operation of certain nerve, or brain centres, thus *endowing matter and material force with attributes and activities* which are *spiritual*. The apparent sub-consciousness should be referred to the rapidity of thought, which makes us heedless of the mental operation; or to the fact that we give no attention to it and hence have no memory of it. There may readily be mental activities which are of such a feeble and indefinite character that we have never heeded them at all. Indeed we often do things without thinking what we are doing, as in absent-mindedness. The act is a true voluntary one, but we are so occupied with something else that we give it no attention, and instantly forget it.

Memory itself may be simply a retaining of vast stores of knowledge by mental activities of which we are oblivious, because we are so occupied with other things, that we heed them not, or because the activities are so slight that they attract no attention, and hence fade away from memory, as do the acts of the absent-minded man. But they spring into activity and vividness of recollection when we attend to them. They are forgotten conscious, voluntary activities, which we are able to recall.

A special sub-conscious activity is no more needed for the phenomena, which are attributed to it, than it is needed for the acts of the absent-minded one, or for the rapid flow of speech of the young girl, or for the unremembered dreams of our sleeping moments.

Thus, a Double Personalty, and Double Consciousness, in addition to what has already been said, are evidently unnecessary. The phenomena referred to them may readily be explained by the way in which attention may be directed to mental activities, or departments of our spiritual being, to which we ordinarily give no heed, for

2 Power of Spirit over Spirit

reasons such as just mentioned. When these come to light, it is not the appearing of a second Personality, or Consciousness, but the revelation of that to which we have been giving no heed, and the doing of that which is forgotten afterwards, as dreams are when we wake.

The Second Element in the probably true explanation of hypnotism, etc., which we have mentioned, is *the direct power* which one mind, or spirit, has over another. Of this there can be no doubt; and the power may be far greater and deeper than we suspect, and *hypnotism*, etc., may be simply the revelation of the fact. We are always influencing one another; some rule others at pleasure. By simple act of will we control, and direct that which is material, as the nerve-force, and limbs of our body; and the well founded supposition is that we also may, and do direct, and control that, which is spiritual, by mere will power. We *will*, and the soul of another responds, and obeys, and receives a permanent impress.

In the case of the treatment and cure of cigarettism, alcoholism, opiumism, etc., the operator does for the individual, during the hypnotic sleep, that which the victim of these habits ought to do for himself, by self-discipline and training, but which he does not and will not do. He has built up for himself a bad character and acts accordingly. By means of suggestion and direct will-power, the operator fashions the character of the patient, which abides after the hypnotic sleep has passed, and determines his future conduct, though the hypnotic experience is itself forgotten as a dream.

The only excuse for the use of the words "Double Personality," "Double Consciousness" and "Sub-conscious activity" is, that these terms may be employed in a secondary and indefinite sense, more or less figuratively. This, however, is confusing and misleading, intimating, and possibly understood as affirming, that, in

Proofs

1 Indestructible

some mysterious way, we are each two Persons, and have two different consciousnesses, which is contradicted by the Personal Unity of which all men are intuitively assured.

Thus knowing, from Intuitive Cognition, that such is our Being, that we have a past, present and future, the question here naturally arises, have we any assurance in regard to immortality? Are we to live forever, or is our hope of life hereafter an unproved and unfounded supposition and anticipation? What answer does Science give?

SECTION IV IMMORTALITY

Consciousness can, of course, give us no direct and positive assurance in regard to the length of our continuity of being. It sees only that which now is. We have, however, various well founded reasons for believing in our Immortality. These are of such a character, that they may be regarded as *proof* of the wonderful anticipation.

Proof I. The clear and positive teaching of Divine Revelation. This has the force of scientific proof, in so far as the possibility, and the reality of Divine Revelation is itself a truth of Science, as we have endeavored to show that it is.

II. From Science. This teaches the conservation of force, and the indestructibility of matter. No force has ever been lost, and no atom of matter has ever been destroyed—there is as much force now as ever, and as much matter; and so it will ever be. This is the confident assurance of Science. There is also a spiritual substance with its attributes, or forces. This is as certain, as that there is a material substance, and its forces. If there be a conservation of force in the material, there is no reason why there is not the same *persistence* of force in the spiritual substance; this cannot be de-

2 Annihilation Unthinkable

stroyed. And if the material substance remain forever, there can be no reason given, why the spiritual should not also. Indeed, in as much as the spiritual is the superior, an ever-abiding nature must be all the more assuredly attributed to it, since this belongs to the inferior, material substance. *This seems to be a very strong proof* of the ever-abiding nature of the spiritual; and this proves personal immortality, in as much as the spiritual substance exists only as individual entities, or persons.

2. Annihilation is unthinkable. We cannot conceive of that which has being, as going out of being; of *something* becoming *nothing*. We can no more conceive of this, than we can of something coming out of nothing. As far as we can have any conception of it, *being has an ever-abiding persistence*. But the spiritual substance, or person is a real being, and hence its becoming nothing is unthinkable. It must abide forever. It came into being by the act of the Creator, and it abides unless He destroys it. And it seems impossible, that He should destroy it, Life here is so brief; in innumerable cases it is only for a few hours, or minutes even. To destroy it would be bringing into being simply to take away being.

Scientifically both the material, and the spiritual substances, and forces must abide forever—*they cannot of themselves cease to be*. They cannot pass into nothing. If they cease to be, they must be destroyed by the deliberate act of the Creator.

Such act is not unthinkable. God is the source, and the support of all being, and it is conceivable that the being, He once imparted, may, as it were, be taken back into Himself. This would not be a something becoming nothing.

3. The Analogy of Nature. The law and order of Nature are that every thing has its own proper time for

3 Analogy

4 Religion

development, and for maturity. According to this law scientists affirm, that the time of human life should be about one hundred years. This, however, is true only of the body. Such are the powers and capacities of the soul, that a far greater time is needed for their development, and maturity. Indeed it seems to be impossible to set any limit to the development of the human soul; it has unbounded capacity for the acquisition of knowledge and for the activity of all its powers. According to the above law and order, therefore, it should live far beyond the time limit of the body, and on to the indefinite future.

4. The Religious Nature of man. This is as real and abiding a characteristic of human nature as any other. It has distinguished men throughout all generations; it is inseparably interwoven with all stages of human society. Mankind has believed in and worshipped God.

But an essential element in religion is the unseen spiritual world, and the life beyond. This comes forth very evidently in all degrees of religion, except perhaps in the very lowest; but even there it *is*, only it is undeveloped.

So far then as this element of human nature corresponds with reality, and men have not ever acted upon a falsehood, we have in it a proof of immortality. This characteristic of mankind is *a fact*, and its explanation must be that God has so revealed Himself in Nature, and has so constructed the human soul to perceive such revelation, that men without reasoning about it, without thought, or care on their part, *have ever seen and believed*, just as children take in a thousand things without any effort or purpose. It is remarkable, that the religious characteristic is the strongest in childhood, when as yet reasoning has not arisen to interfere with spontaneous perception of truth. When men open their eyes

5 Conscience

and see the things that are, they are realists and religious, believing in the spiritual and divine; it is only when they begin to rely upon reason, rather than upon sight, that they become idealists and infidels.

This is the case—mankind have ever been religious—the *only* explanation of this is that men have *seen* a revelation, which God has given of Himself—the faith of men in God is as well founded, as it is universal, and as religion includes the life hereafter, we have in its well-founded and universal prevalence a proof of immortality.

5. Conscience. This is an indisputable faculty of man. He perceives right and wrong, that right deserves reward, and wrong deserves punishment; when he does right, he feels a pleasurable approval; when he does wrong he feels painfully condemned. Over all this he has no control. Here again we have a fact, which must be recognized and explained. With one accord, men have explained it, by saying it is the voice of God, though the language employed in so doing may vary greatly. The reason why they have so regarded it, is because they *perceive*, or *cognize* its nature. It necessarily refers to a higher and unseen power, which controls them. This is the *fact* which men take knowledge of, and the fact remains, whatever explanation may be given of it.

There is no need of supposing, that in it there is anything supernatural. It is equally the voice of God, whether He speaks directly, or in the most indirect manner, through complex secondary causes. The plain truth is, that there *is* right and wrong; men perceive these, and that they must refer them to a higher and unseen power, or being. Without such reference right and wrong, with their reward and punishment, have and can have no meaning, no existence. But in this is involved the life-hereafter, as men universally acknowledge; and

Conscience Part of Religion

which is the more evident, because in the present life the right does not prevail as it should, and rewards and punishments are not experienced according as they are deserved. There must be a life hereafter, when all will be properly adjusted.

This argument from Conscience is closely connected with that from the Religious Nature of man. Not only because Conscience is a large part of Religion, but also because they are both derived from and dependent upon the knowledge of God. Man has such power of perception, and God has so revealed Himself, that men perceive the revelation. Knowing that God is, they reverence and worship Him; *hence* Religion, actually and practically. Without such knowledge there would be no religion. So also, knowing that God is, they desire His favor, and fear His wrath, as their Supreme Ruler. They seek His favor, which is life, and avoid His wrath, which is death, by obedience to His Will. His Will and His Nature, therefore, are the standard of right and wrong. *Hence* Conscience with its knowledge of right and wrong, and with its peace and sting, according as obedience is, or is not rendered: without belief in God there is no Conscience in men, except that which may be called social conscience. This, however, is only secondary, and, *apart from the true Conscience*, an inferior, mean thing. In it man and man's will take the place of God and God's Will; and the favor and displeasure of men give the peace and the discomfort which accompany obedience and disobedience to *their* wishes, will, rules, etc.

It may not be objected to the force of these two arguments, that a future life is not necessarily involved in Religion and Conscience—that men might know and worship God now and here, without having any hereafter; and that in the present world without any refer-

6 Aspirations of Soul

ence to another they might desire God's favor, and fear His wrath and seek to please Him by obedience to His Will. Such supposition is only a theoretical possibility. It does not accord with the real facts of the case. In the minds of men Religion and Conscience have always been associated with the thought of the hereafter, and it is *this*, which gives them their reality, value and power. Practical experience shows that as the assurance of a future life declines, both Religion and Conscience decline also.

6. The Aspirations of the human soul. These go out to the boundless future, and to the living God. This is another indisputable fact which must be recognized and explained. The explanation is that it is due to constitution, the structure, the nature of the human soul. In seed germination the rootlet turns downward, the stem upward; plants turn towards the sun, or are drawn by it, fish, birds and beast associate themselves together after their kind; in pairing season birds seek their mates, as also do the beasts of the earth. All this is because such is the constitution, structure, nature of these living creatures. It is just as true that because of its nature the human soul aspires after God and the boundless future. Without these it feels dissatisfied, imperfect, unmated. It cannot be denied, that this is the nature and the outgoing of the soul, and hence is a proof of the future life. Otherwise our soul is an anomaly, a misconstruction, an unfit thing, a falsehood. Fish and ships are a proof that there is water, birds that there is an atmosphere, air-breathing animals that there is air; these are made, and constructed for their respective elements. And so the human soul, made and constructed for God and the hereafter, in which alone it finds its complement, is proof of these.

7. The Intrinsic Worth of the Soul, and the failures of

7 Worth of the Soul and Failures

the present life. It must be granted, that the soul of man is the highest, and the most worthy thing in the world; all things else are for it. But notwithstanding this, in multitudes of cases, this life's experience is of the most unsatisfactory character. Innumerable multitudes are still-born, multitudes die within a few hours, or days of birth; yet other multitudes die within the first, or second year of infancy; yet other multitudes in early childhood; all of these have *failed* to come to the full consciousness even of what they are; and all this is repeated unceasingly as the years go by. Add to these the innumerable number of those who die at the opening of manhood and womanhood, and of those, who are cut off in the full activity of their maturity. And to these add the multitudes whose life has been a failure; a life full of disappointments, and bitterness, and consider that this is the abiding condition of the world from age to age.

Man's experience here is out of harmony with what man is in his own real worth. It would seem that all this would be impossible unless there be an hereafter. When we take into consideration the superior excellence, the dignity, the worth of every individual human being, and that each one is brought into being by the creating act of God, the only explanation of the lamentable character of human experience is, either that this is a world overthrown, and ruined by iniquity, and hopelessly left to perish because thereof, or that there is another world, where human life, cut short here, is continued, and man has an environment in some measure corresponding to his own inherent superiority and worth.

8. There is a Negative proof. No well founded objection can be brought against the supposition of the future life. It is vain to object that it is beyond all human experience, as it must necessarily be so; or that

§ Negative Proof

it is contrary to human experience, in as much as we know only of life, which consists in the vital union of soul and body, and if that be destroyed the soul must perish equally with the body. The body perishes because it is an organism, made out of existing material, needing continual repair; it grows old, and more and more enfeebled, and is sustained by its vital union with the soul. But it is not thus in regard to the soul. It is a complete unit in itself, having real being, not made out of anything, needing and receiving no repairs; unlike the body, which perishes by disintegrating and passing into the separate material elements out of which it was constructed, the soul can perish only by *ceasing to be*; being an entity, it must be destroyed, must become nothing, which is unthinkable. Moreover, the soul is the superior; it sustains the body, but is not sustained by the body. The body is its organ, or instrument, and there is no proof that its being is dependent upon the body. Because, at present, all spiritual activity includes brain activity, it does not follow that there can be no spiritual life and activity without the brain. The brain acts in all spiritual action, because of the vital union between it and the soul, but when that union ceases the brain perishes, but the soul may continue to be, and to act.

To show the utter absurdity of the objection to Immortality founded on the alleged necessity of brain activity for thought, etc., we quote the testimony of two eminent physiologists. In the "Ingersoll Lecture at Harvard" on Human Immortality, Prof. William James says: "If we are talking of Science positively understood, function can mean nothing more than bare concomitant variation. When the brain activities change in one way, consciousness changes in another; when the currents pour through the occipital lobes, consciousness *sees* things; when through the lower frontal region, con-

Prof. James Quoted

Contrast with

consciousness *says* things to itself; when they stop, she goes to sleep, etc.

In strict science, we can only write down the bare facts of concomitance; and all talk about either production, or transmission, as to mode of taking place, is pure super-added hypothesis, and metaphysical hypothesis at that, for we can frame no more notion of the details on the one alternative than on the other. Ask for any indication of the exact process either of transmission, or of production, and Science confesses her imagination to be bankrupt. She has, so far, not the least glimmer of a conjecture or suggestion,—not even a verbal metaphor or pun to offer. *Ignoramus, ignorabimus*, is what most physiologists, in the words of one of their number, will say here. The production of such a thing as consciousness in the brain, they will reply, with the late Berlin professor of physiology, is the absolute world-enigma,—something so paradoxical and abnormal as to be a stumbling block to Nature, and almost a self contradiction. Into the mode of production of steam in a tea-kettle, we have conjectural insight, for the terms that change are physically homogeneous one with another, and we can easily imagine the case to consist of nothing, but alterations of molecular motion. But in the production of consciousness by the brain, the terms are heterogeneous natures altogether; and, as far as our understanding goes, it is as great a miracle as if we said—Thought is ‘spontaneously generated,’ or ‘created out of nothing.’”

This testimony is true, and it effectually reduces to an absurdity and impossibility the objection founded on thought, etc., as a function of the brain on either of the two hypotheses, “production” or “transmission.”

In striking contrast to these, the view we maintain is self-evidently true and has the direct testimony of Consciousness. We thus know that the soul is a real per-

sonal entity, that it is vitally united with the body, that the body, as a unit, is the instrument of the soul, by means of which it is brought into intercommunion, or interaction with both the material and spiritual universe. By means of brain, nerves, muscles, etc., it cognizes the material world, receives influences from it, and works upon it its will. By the same means it gives outward expression to all its endless, and varied thoughts, emotions, wishes, will, and holds communion, in the complete and rapid interchange of all spiritual experiences, with its fellow beings.

We have the *infallible knowledge* of this instrumental use of the body by our true self, the soul. The distinct testimony of Consciousness is, that this is the relation of the soul to the body,—the soul is a *superior* entity, which uses the body, as its instrument. Here we have an indubitable fact, known and recognized by all—a fact which precludes the possibility that the soul, with its *immaterial* being and attributes, can be produced by the brain, or can owe the continuation of its entity to it.

With the objection from brain activity thus completely swept away, the negative argument for the future life has great weight. Of very few things can it be said, as in this case, that *every thing is in its favor, and nothing against it*.

9. Cumulative. It is a fact to be noted, that though any one of these proofs may be insufficient, their cumulative power seems irresistible. It is remarkable, that so readily a series of independent proofs of Immortality may be given. There are many things, which we accept upon far less evidence, and we would without hesitation regard the proof of Immortality all sufficient, were it not for its own wondrous nature, and all important character.

Inseparably connected with the Intuitive Cognition, that ours is an essentially unbroken continuity of ongoing

Deep Mystery

Needless Amount

Being, is the question as to Time. With this is associated the thought of Space. In ordinary thought and conversation these go together. Their consideration, therefore, here naturally arises.

SECTION V TIME

The idea of Time has presented a problem, which is difficult and mysterious, and which has called forth endless disputation, resulting in varied, confused, subtile opinions.

Time itself is a profound, impenetrable mystery. There has, however, been a needless amount of mystery thrown over our thought of it; and confusion, and error have arisen from the wrong way of considering it, and from the attempt at the impossible.

If we deal with it, as we deal with other mysteries, and be content to confine ourselves within our proper sphere of mental activity, we may readily obtain a simple, clear, true, and satisfactory understanding of it. We do not know what the essence of the soul is, nor the nature of our union and communion with God. To endeavor to discern, and discuss these, would involve us in deepest perplexities, and would destroy the simple and practical understanding, which we have of the soul, and of our fellowship with the Divine Being. So also we cannot penetrate into the essence of Matter, and of material force. We can form no conception of what gravitation, and electricity are, nor how plants, and animals grow and multiply. Yet we have a simple, and practical knowledge of these, and of kindred things innumerable, which would be swept away by attempted insight into the hidden depths of these mysteries themselves, and the way in which they subsist in the great Creator and Up-holder. Thus also we do not know *what* Time, nor *what* Eternity is, nor the relation of these to one another, and

From Cognition of Being

to the Infinite Being and to ourselves. It is the attempt to penetrate into, and lay hold of these that has plunged man into confusion, and subtilties, and surprising errors, when the simple and practical knowledge of them was as readily at hand, as in regard to the other things, which we have mentioned.

Our primary idea of Time comes directly from the *Cognition of our own being*. "I am, I continue," This is perfectly plain, simple, intelligible, as much so as any other simple thought which we have, as of substance. force, motion, space, matter, spirit, attribute, the world, ourselves, God. These *are*, and we know them. Time *is*, and we know *it*. The simple idea of Time is "continued being," or the continuation of ongoing being. We express this by the word "wait"—"I wait." We are conscious of waiting. We perceive our thoughts, or concepts, as they come and go; we note the new ones, and the reappearing of those, which we have had before. Thus we have the simple, and definite idea of past, present and future. As Time is continued being, or the continuation of being, it is *inseparably connected with being*. We cannot think of Time without being, nor of being without Time. This is not because Time is a law, or condition, or form of thought, or a necessary à priori postulate, or any metaphysical subtilty. But the reason is, because Time is an aspect, a part, a constituent, an element, a characteristic, a quality, an attribute of Being. In knowing "being" we know *it*. We cannot know "being" without *thereby* knowing it. Time constitutes the very, and the only definition which we give of "being." "Being" is *that* which *is*, and *continues*. This is the definition of our own being, "*I am, I continue;*" that is I am now, my now is fading into the past, and is realizing the future. If being is *real*, time is real,—if being is imaginary, time is imaginary;—if there is no be-

Its Reality

Attribute of Being

ing, there is, and there can be no time, for Time is an element, aspect, characteristic, quality, attribute of Being, and otherwise has no reality; it is not. It stands related to "being" exactly as thought, feeling, will stand related to spirit, and as figure, extension, motion do to material objects. We know the former in knowing spirit, or spirit in knowing them. We know the latter in knowing material objects, and they are not, without these objects. So also with Time and Being. We know the one in knowing the other, and the one is not without the other, and we have as definite an idea of Time, as we have of these other things. There is no more mystery in one case, than in the other. We know just as well *what* Time is, as we know *what* thought, feeling, will, figure, motion in themselves *are*, or we know these no better than we know what Time is.

We cannot think of ourselves, nor of anything without the thought of Time, and we cannot have the thought of "*No Time.*" As far as we are able to conceive, we must conceive of Time. We cannot help thinking of it as stretching backward boundlessly into the past and as reaching forward boundlessly into the future. For Time to be no more is for us unthinkable. This has been regarded as among the most profound mysteries, and the most acute and subtile thought has been expended upon it, in the effort to understand and explain it; and the suggestions made have been often exceedingly erroneous. In truth the mystery here is no greater, than that which rests upon other things with which we have to do, and the simple explanation is at hand, just as it is in regard to other things; the same principle of explanation applies to it and to these alike.

There are two evident, and all-sufficient reasons why we must think of Time in the way pointed out. The *first* is because we cannot go beyond our experience.

2 Reasons, Why "No Time" is Unthinkable

This is true in regard to every thing. The foundation and the material for all our thoughts are from experience. Beyond this we cannot go in thought, concept, imagination. Were we as a fish, or some deep-sea creature, which had never come to the surface, nor touched in any place the confines of ocean's depths, we could conceive of no other sphere than that of water, and of no life, but of that within it. And no thought of any other could be communicated to us. We know what it is to be a living soul in vital union with a living body, and what it is to live in this material world. But we can form no possible conception of a disembodied existence, nor of a pure spirit life in a purely spiritual world. The only concept, which we can form of the world above, is such as we construct out of our thoughts of this world. We are compelled to think of it as some fair city, or country of extreme beauty, with verdure, trees, flowers. The only thought, which we can have of ourselves, with kindred and friends there, is that of shadowy forms of our present selves, recognizing one another as we do here, looking into one another's faces, and talking and acting as we do now. To us angels are but exalted men, and we cannot altogether escape from anthropomorphism in our thoughts of God. We attribute to Him some fashion as of a man, radiant indeed, too bright to look upon, but still with human form, Our Father, with loving face and outstretched arms and hands. Unless by great effort we, in some measure, think of Him as *like our own* souls, a spirit such as we know ourselves to be. We can have no idea of the stars except as worlds like our Earth. They shine with light such as we know, and whether nebulous, or solid, their structure and material must be the same as that with which we are here acquainted, or be to us entirely unknown. We can form no possible conception of anything else.

1 Reason, Experience

The same is the truth in regard to Time. We have no experience except that of being in Time. Beyond this experience we cannot go in thought, just as in the cases mentioned we cannot go beyond our experience of them. All else, all beyond is an absolute blank and impossibility for us. We are creatures of Time, as the deep-sea fish is a creature of the ocean. To its thought the only possible sphere is that of water; to our thought the only possible realm is that of Time. Confined by experience within the realm of Time, with no conceivable experience beyond it, we cannot think of ourselves and of the world except as in Time. And as all beyond our experience is a blank and an impossibility to thought, it must be thus in regard to Time, as in regard to everything else. Hence we cannot think of "No Time;" *to our thought* Time must be boundless; there can be nothing before it in the past,—nothing beyond it in the future.

There is no peculiar mystery here. This is the old familiar truth, which we meet everywhere. We know what Time is, we know what we are and our fellows and the things of the world, but of the beyond we know nothing, except as it is a *reproduction* of the things which are. The world to come must be to our thought such as this, its inhabitants such as we are, its life and activity such as the present, its realm such as that which now is, that of Time.

The fact to be noted is, that in regard to Time we no more have a so-called necessary "form," or "postulate," than we have in regard to everything else. It is a simple matter of experience. We are in Time, and having no experience but this, we can form no other thought.

The *second* reason why we think of Time in the way pointed out, is because it is Inseparable from "Being."

We cannot think of "Being" without thinking of Time. Time is a reality, as truly so, and in the same

2 Reason, Inseparable from Being

sense as are thought, feeling, volition, figure, motion. But as these are not apart from that to which they belong, so Time is not apart from that to which it belongs; that is from "Being." The thought of the one involves the thought of the other. It is by knowing Being that we know Time. It is by thinking of Being that we think of Time, and by thinking of Time that we think of Being.

Hence it is that we cannot have thought of any reality, either actual or imaginary, without including the idea of Time. We cannot attribute "being" to ourselves, we cannot think of the "I am," of our friends, of our fellows, of animals, of God, of this world, of the next as having any being, without the idea of Time. We cannot think of any sphere, or realm beyond Time as *being* without thereby attributing Time itself to it; the effort is self-destructive. We cannot give to any imaginary person, thing, world, or realm imaginary being without thereby giving to such imaginary Time.

Here we have the simple, plain explanation of the fact why we *must* think of Time. It is because *if we think at all*, we must think of "Being," of our own, or other being, certainly of one, or both. This is the reason why for us, it is unthinkable, that Time is not; we must think of "being" if we think at all, with its essential characteristic, or attribute of Time. Here also is the reason why in our thought Time is boundless in the past, and in the future. It is simply because, however far thought, or imagination, may carry us in either direction, we think, or imagine some reality there; some world, or realm, or sphere, the Deity, or ourselves, even if we are only there as on-lookers. It is only thus that thought and imagination can bear us to the far off beyond. They must at least give us our own being there. We think or imagine *ourselves as going onward*

True Nature of Time

further and further. And with this thought, or imagery of some kind of reality there, is the thought, or imagery of Time, the essential characteristic, or attribute of all "Being." As by thought and imagination we cannot annihilate our own being and all being, we cannot in thought, nor in imagination annihilate Time.

Hence again it is evident, that there is no especial mystery in regard to our thought of Time. It is like our thought of other things. We must think of their essential characteristics when we think of them; we must think of Time when we think of Being, of which it is the characteristic; and as we always think of being when we think at all, we cannot destroy the thought of Time. It is a mere question of non-contradiction. We cannot think of Time without thinking of it; or we cannot at once think of Time and not think of it.

Here we are to inquire, what is the *True Nature* of Time itself? Has it reality, is it boundless, without beginning and without end, must it of necessity be—is it possible for Time not to have been, and for Time to be no more?

By attempting the impossible and by disregarding simple self-evident truth, men have here fallen into great confusion and error.

We must bear in mind that we are absolutely confined within the finite, and cannot penetrate into the Infinite. First of all we must draw the sharpest distinction between Eternity and Time. The former belongs to the Infinite and of it we can form no conception whatever. To attempt it is to endeavor to pass beyond the sphere of our mental activity. This we can no more do than the fish can leave its watery element and swim through the atmosphere, or than a bird can leave its sphere and fly through the outlying ethereal realm. We often speak of Eternity in the terms of Time, but this is be-

Not Eternity

cause we can do no better on account of the limitation of thought and speech; just as for the same reason we often speak of God in the terms of man.

Eternity is real because it is an attribute of the Infinite "Being" of God. It is "*being*" without succession and without change, and without limit. All of these, however, are negative terms. We cannot, moreover, conceive the relation of Eternity to Time, nor of Time to Eternity. It is not proper to say that Eternity was before Time, and will be after Time. This would divide Eternity into a past and future, which is impossible. There is not a past Eternity and a future Eternity. Time is more like a dot on but not in a line drawn in the form of a circle. Of it we can say "it is there"—"it is not there," while the unbroken unity of the circle remains. There is the same *entire* line going from the dot to the dot and beyond in either direction it matters not which. This, however, does not enable us to conceive the relation of Eternity to Time, but it may help to remove an erroneous thought.

It cannot be said that Eternity is an Eternal *Now*, no more than it can be said to be an Eternal Past, or an Eternal Future. It is as much the one as it is the others of these. It is not all the past, the present and all the future, for all these times combined would be but an infinitesimal point in regard to Eternity. It is not a blending of past, present and future into a Unity, for these elements are not within Eternity. At best all we can do is to say Eternity is an attribute of the infinite "Being" of God—Eternity *is*—Time *is*.

As Eternity is real for the reason given, so *Time is real* for a like reason. It is the *Attribute of created being*. We must be careful not to attribute to Time any characteristic of Eternity, such as boundlessness, saying that it is without beginning and without end, immeasur-

An Attribute of Created Being

able, necessary—that it is impossible for “Time” not to be.

The true statement is that Time has reality only in connection with *created being*. With God alone in Eternity, Time was not. Time began with the coming into being of created things, spiritual or material. It continues while they are; with their annihilation it would end.

It is measurable, and ever has a definite length, though only for a moment, as it is momentarily increasing. From its beginning at first creation its present end is always onward. Its present length is the number of millions and millions of ages from the first creation to the present moment. It will never come to a final end if immortality be the portion of intelligent beings, or if the material universe ceases not; otherwise it will.

It is a very easy thing to keep within the bounds of reason, and have clear and definite knowledge. We thus know what Time is. It is a reality, an attribute of our “being.” This gives us a true knowledge of Eternity—it is an attribute of the Infinite Being of God. Leaving this veiled within the impenetrable mysteries of the Infinite, we know that Time is dependent upon and commensurative with creation, beginning with created things and continuing while they endure, with an ever onward moving end and coming to a final termination only if all things cease to be, and God, clothed upon with Eternity alone is.

With the thought of Time is intimately associated the thought of Space. We are in Time, and also in Space, both spiritually and corporally.

SECTION VI SPACE

The Problem of Space resembles very closely that of Time, and the same confusion and mystery have been

Idea of Space from Cognition

thrown over it, and kindred errors have been entertained regarding it. Yet the same plain and reasonable way of understanding and explaining it is close at hand.

We think and we are obliged to think of Space in much the same way in which we think of Time, and for essentially the same reasons. Our primary idea of Space comes from our Cognition of the external, material world, and of ourselves in reference to other persons and things. The idea is a perfectly clear and definite one, as much so as that of Time, or of any other thing. We have that cognition by visual and tactual perception of expansion or extension, and the distance apart of one thing from another, with the motion of one thing nearer to and further apart from another. So far as these things are real, space is real, and so far as they are imaginary we have imaginary space.

Here again it is not a law, a form or postulate, or condition of thought, nor any subtilty of the kind, with which we have to do in thinking of Space, but a *simple cognition of that which is*. And we know what Space is just as well as we know what other things are, such as spirit, matter, essence, substance, thought, force, figure, time. We have an intuitive cognition of all these things alike. We may puzzle and weary ourselves in the effort to conceive what essence *is*, or what substance and force *are*, but utterly in vain. The difficulty, wearisomeness, and fruitlessness of the effort are fully as great, when we in vain puzzle and weary ourselves in the effort to conceive what expansion, length, breadth, thickness, motion, distance *are*. Of these we have the clearest and the most definite thought. They themselves constitute our knowledge of material objects and of the material world. We know these objects and the world by knowing them. Take them away, and all things, the entire material universe is utterly and immediately annihilated, and neces-

Attribute of Material Things

sarily springs immediately into being again the moment these are restored. They and the world are inseparable—they and it stand and fall together, as characteristics, qualities, attributes, and that to which they belong. They are the concomitants, the qualities or attributes of objects and of the world. They form our definition of things and of the world, and without them we can give no definition of these. What is the world and that of which it is made up or contains? It is that which has expansion, length, breadth, thickness, distance, motion. There can be no *actual* extension, length, breadth and thickness without an object having these. Distance is the apartness, or the expanse between definite points or parts of an object, or between different objects; there must be objects for this to be actual. Motion is the increasing or diminishing of the expanse between two objects; there must be objects to draw near or go further apart from one another.

One object alone in space would be absolutely still. All motion is relative. We may say of passengers in a railroad car, they are all perfectly still, neither hand nor foot moves; of a watch in the car, it has stopped. I open the case, there is no motion within, yet all are moving perhaps at the speed of sixty miles per hour. We may say of the Pyramids, they have remained motionless for thousands of years, yet they are moving with the velocity of Earth's revolution around the Sun.

So true is it that objects are necessary for Space that Space without them is unthinkable and impossible. It is a mistake to suppose that we can have the thought of absolutely pure and empty Space. The attempt shows its own futility. The moment we make the attempt, we must suppose some object, or point from which as from a centre illimitable distances stretch forth in every direc-

No Space apart from Objects

tion; but direction itself implies things, an upward, and a downward, to this side and to that, in this way and that way and every way. There must be a *something* from which these radiate, and in reference to which they each have their own peculiar direction. The very idea of boundlessness is that of greater and yet greater distances, ever onward further and further away from some thing, at the least a centre of a sphere. We cannot think of great distances from nothing in one direction to nothing in another. These opposite directions imply an intermediate point, or object; and from nothing to nothing is nothing. In dealing only with zero in arithmetic the result is ever zero. Annihilate the one objective point or object, the centre of the sphere and all is oblivion.

We cannot think of pure space beyond the material universe for the material universe would thereby be made the object, around which as a centre the outspreading space would spread in every direction, and from which its remote regions would be further and further away, as thought endeavored to penetrate them; and the remotest regions would themselves be an objective point from which regions yet more distant extend.

Thus the attempt itself shows that we cannot eliminate the thought of some thing, or object from the thought of space. To think of objects is to think of space, and to think of space is to think of objects. We may, of course, think of empty spaces. This is a most familiar fact. There may be nothing between two objects. This, however, is altogether different from that of which we have been speaking.

It is interesting to note that the idea of Space, here presented, as the expanse in length, breadth and thickness of material things, and expanse between different parts of these and between different things, appears in

Mosaic Account

We know Space

the Mosaic account of Creation in a very clear and definite manner. God created the original, single, far spreading Nebula, with its length, breadth, and thickness. This is called "waters," that is an ethereal fluid, or nebula. "God said Let there be an *expanse* in the midst of the waters, and let it divide the waters from the waters, and God made the "expanse," and divided the waters which were under the expanse from the waters which were above the expanse, and it was so, and God called the expanse, heaven." *Thus God made Space.* The expanse of bodies, the interstellar spaces, the space separating our Earth from the worlds above and around us.

Thus it appears that there is no peculiar mystery resting upon the idea of Space. Equally with other things, we have a definite knowledge of it. We know the thing itself. It is inseparable from material objects, of which it is the characteristic, property, quality or attribute.

As we cannot help thinking of Time, so also we cannot help thinking of Space. We must, moreover, think of it as boundless, without beginning and without end. We cannot annihilate Space in thought. To our thought it must always have been, and evermore must be. This also has been regarded as one of the most profound of mysteries, and for this as for our thought of Time, all manner of subtile reasons, have been suggested with attendant confusion and mistake. The explanation is at hand, is perfectly clear and satisfactory, and is the same as that already given in regard to Time.

The explanation is twofold. We cannot go beyond the range of our experience. We are creatures of Space. We were born in Space, we have lived within it, and have never had another kind of experience. We have no knowledge and can form no possible conception of any other kind or mode of existence. We know of no other

realm or sphere of being, and consequently all else but the realm of Space must be to us an absolute blank. No idea of any other sphere could be communicated to our mind; any revelation of it must necessarily be after the analogy, and in the terms of expression of the present world in which we live. It is only in this way that there can be any knowledge given to us even of the abode of God. Moreover, because of the vital union of soul and body, we cannot help thinking of our bodies as part of ourselves. A bright little boy said, on looking upon the dead body of his father, "I wish God had taken all of my father to heaven." According to the constitution of human nature, the body is something more than a mere garment to be worn and then forever cast aside as useless. It is, as the little child thought, a part of ourselves; it is essential for the complete fulness and well-being of us men. Hence the promise of the resurrection, and our joy because of this assurance. We do not and cannot have a conception of the disembodied state. All attempted thought of it fashions itself after the pattern of our present selves, and of our life here. We think of ourselves and friends above with the old familiar forms, features, limbs; seeing, hearing, speaking, touching and handling one another, gathered together in separate companies, moving from place to place. To our minds the body seems indispensable. It is the organ, or instrument by which we communicate with one another, and with the external world. How shall we see without the eye? how shall we hear without the ear? or handle without the hands? how without hands shall we fashion things at pleasure, or do any work, or accomplish anything whatever? How shall we recognize one another, if we and others be invisible, intangible spirits? Regarding the body as part of our very selves, we in thought clothe angels, and God Himself with some kind of corpo-

1 Experience

2. Need of Objects

real form. Thus because of the construction of our nature, because of the vital union of soul and body, because we think of the body as part of ourselves, and as our indispensable instrument, and because this embodied state is our only experience, and our sole knowledge of ourselves, the idea of Space impresses itself upon and fashions all our thoughts, even those which are the most spiritual, as when in spirit, we hold communion with God.

What we said in regard to Time is true also of Space. Confined within Space with no experience except within it, and within the body, with all beyond a blank, we cannot think of "No Space;" to us space must be boundless, there can be nothing beyond it in any direction. However far thought and imagination may bear us, the realm to which we penetrate must be the reproduction of that in which we live, and of which alone we have any knowledge, the realm of Space.

Here we must note that in regard to Space we no more have a law, or form, or postulate of thought, than we have in regard to any thing else. It is a simple matter of experience. We are in Space and having no other experience than this, we can form no other thought.

The second explanation of our mode of thinking of Space is in the fact that it is inseparable from objects; of these it is the characteristic, the property, quality, attribute. As these are inseparable from that to which they belong, in thinking of the one we think of the other. We cannot think of the world without thinking of its great characteristic, property, attribute, that of expansion, space. We cannot think of our bodies, nor of our bodies as part of ourselves without thinking of their attribute, extension, space. As in thought we clothe God, and angels, and disembodied souls of men with some

We must think of Objects

kind of corporeal form, within some such world as ours as their abode; as we cannot entirely disrobe ourselves of our bodies, as the world is a world of material objects, as we cannot think of being out of the world, as all things within the entire range of thought are, as it thus appears, inseparable from some kind of bodily presence, if we entertain thought at all we must have the thought of Space, the attribute of body.

Here is the perfectly plain and sufficient explanation of our mode of thinking of Space. It must *be*, and it must be boundless, because we cannot entirely escape from the thought of some kind of bodily presence; we cannot think of ourselves as being out of the world, this is our all, there is nothing beyond. With this thought of the world and of bodily presence comes the thought of extension, space, the *attribute* of these. As in thought we *cannot annihilate every thing*, the world and all bodily presence, we cannot annihilate Space. Here as in the thought of all things else, we think of the attribute in thinking of the thing. As in regard to Time, it is a question of non-contradiction. We cannot think of Space without thinking of it, we cannot at once think of Space and not think of it. An object, or body and its attribute are one and the same. To think of the one is to think of the other. To us Space, therefore, must *be* and it must be boundless; boundlessness being involved in the necessity. It is also boundless because the very thought of it involves the thought of objects with their attribute of space, ever new objects with ever new space. We do not have the thought of absolute, empty space. We think of some object as a centre from which space extends in every direction to successive boundaries more and more remote; each boundary being an objective point, *where we stand* to look onward to the boundary beyond. The boundlessness of Space shapes itself to

Real Nature of Space

our thought as a series of distances from one object, or objective point to another indefinitely; and with this persistence of objects is the persistence of Space, their attribute.

The twofold explanation of our mode of thinking of Space is concisely expressed in the two sentences already given—"We are in Space, and having no other experience than this, we can form no other thought,"—"Space being an attribute of things, or objects, as we cannot in thought annihilate every thing we cannot annihilate Space."

But the question arises what is the Real Nature of Space? Is it necessary? Is it boundless?

We have a true knowledge of Space by our infallible intuitive cognition of it. It is, and we know it and what it is. But necessity and boundlessness form no part of our intuitive cognition of it. These thoughts are due, as we have shown, to the limitation of our experience and our inability to think of anything beyond the analogy of ourselves and the world. And in truth our intuitive cognition expressly denies such thoughts of Space. Necessity and boundlessness pertain only to the infinite, but intuitive cognition affirms that Space is finite. All our knowledge of it presents it as measurable, successive, divisible into parts, capable of increase and decrease, confined within figure, or limited as definite distance between points, or objects. The only knowledge which we have of Space, the only definition which we can give of it, is expansion, or distance between two or more things, real or imaginary, which give its two limits, its beginning and its end, and the expanse of a body confined within the boundary of its figure.

Care must be taken not to disregard self-evident truth, nor be discontented with it and attempt the impossible, that of passing beyond what we know and of penetrating

Space and Infinitude

into the unknowable infinite. We must remember that we are absolutely confined within the realm of the finite. We must, therefore, draw the sharpest distinction between "Infinitude" and Space, as we have already done between Eternity and Time. The relation between the two former of these is kindred to that between the two latter.

Infinitude belongs to the realm of the Infinite, and of it we can form no conception whatever, although because of the limitation of thought and speech, we may be obliged to speak of it in the terms of Space. It is real because it is an attribute of the infinite God. It is without extension, without parts, without succession, without measure, without beginning, without end and without figure or boundary. We can form no conception of its relation to Space, nor of the relation of space to it. It cannot be said to be an illimitable sphere surrounding Space upon every side; for this would divide the infinite into parts, that upon one side and that upon another side of Space, which is as impossible as it is to divide Eternity into two parts, that before Time and that after Time. It cannot be said that Space is a part of "Infinitude;" for this again would divide the indivisible; there would be a portion of Infinitude within the boundaries of Space and another portion stretched out beyond them; there would also be the introduction of extension and of measure, which belong not to "Infinitude."

We might here use the same illustration which we gave when speaking of Eternity and Time in their relation to one another. Space may be like an infinitely fine dot on a line drawn in the form of a circle, of which dot we may say, "it is there," "it is not there," while in either case the unbroken unity of the circle remains, it is unaffected by the presence or absence of the dot. If it be present, there is no definite position where it is, for

Space a Finite Reality

there is no distinction of place in the circle, it is a simple unit; and there is the same entire line going from dot to dot and beyond in either direction, it matters not which. While this does not enable us to conceive the relation of Infinitude to Space, it may help us, as before, to remove erroneous thought.

Infinitude must not be confounded with Omnipresence. This latter has reference to Space. It is that attribute of God by which He is at once every where present throughout the entire realm of Space. Of this presence we can form some kind of conception. Infinitude is that attribute of God by which He regardless of Space is infinitely present. Of *this* presence we can form no conception whatever. We may call it God's Infinite Presence. It corresponds with His Eternity, and as in the case of Eternity in its relation to Time, all we can do is to say in regard to its relation to Space—*The Divine Infinite Presence is—Space is.*

As Infinitude is Real because it is an attribute of God, being His Infinite Presence, so Space is real for a similar reason. *It is the Attribute of the created universe.* We must not attribute to Space any of the characteristics of Infinitude, such as necessity, boundlessness, immeasurability.

The plain, true statement of Space is—It is a finite reality—the attribute of the created world—the extension of things in length, breadth and thickness—and the expanse between their parts and between different objects. It began in time with the created universe, and ends should this cease to be—It may stretch beyond the power of our thought, but is strictly confined within the boundary of creation—The open spaces on the outermost portions of the universe are themselves the remotest realms, and boundaries of Space; filled with the interstellar ether, however rarified, or with something more rarified than

Definite Knowledge

it, they as far as this extends are actual Space, and with it Space ends. Beyond we can only think of imaginary or potential space, and only upon the supposition of *something* imagined, or possible. But these have no reality unless by creative power the material universe be enlarged. We can go no further, having reached the limit of our finite realm. More than this we do not know. The relation of Space to Infinitude we cannot tell. We cannot say that they blend in some way with one another, nor that the latter is beyond the former, no more than we can say that Eternity is before or after Time, or that these blend into one another. All that we can do is to say—Space such as we know *is*—Infinitude the attribute of the Eternal God, His Infinite Presence, His all-presence in Infinity *is*.

Thus our knowledge is clear and definite, apart from all confusion, free from all subtleties and difficulty of apprehension. We know what Time and Space are; they are the familiar attributes of created things, they are real, and we know that they have their being in the One "All in All," in The Divine Presence, Eternal and Infinite. Time and Space began with created being and may pass away, "The Divine Presence" abideth, veiled in its impenetrable mystery.

An Illustration.

Although it is of extreme difficulty to give an illustration of the relation of Time and Space to Eternity and Infinitude, we suggest the following. It is to be regarded only as approximate; correct in some respects, but erroneous in others. We are, moreover, to be reminded again that it serves only to remove wrong thoughts; it does not enable us to conceive that which is inconceivable.

Imagine a mathematical point, infinitely finer than the

Illustration

Time to Eternity

point of the finest needle, a point without length, breadth or thickness, without position and without motion within an Infinite Vacuum which has no shape, nor boundaries whatever. This solitary, infinitesimal point might represent Time, including all its countless succession of ages, poised, or being within Eternity unknown to us, as is the Infinite Vacuum, though not unreal as it is, being itself the attribute of God, the foundation and fountain of all reality.

The point is *not a part* of the Infinite Vacuum within which it is, for it is *infinitely small*, it has neither length, nor breadth, nor thickness. So Time is *not a part* of Eternity; in comparison with it, it is an *infinitely small* point, it has no measure, no length whatever.

The point is within the Infinite Vacuum, but it has no position there, for there is no position within it; all position is relative, and there is nothing with which the infinitely small point can be related. It is nowhere, even as a point is nowhere upon, or in reference to the unbroken unity of a circle. So Time, as a unit, is within, but yet no-where within Eternity. The undivided unity of Eternity is equally present with all Time, past, present and future. Without this thought of "nowhere," the illustration would here be in error, as it would present the idea of Eternity surrounding, or encompassing Time; on this side and on that side of it.

Again the point is motionless. Infinitely small in itself, there is nothing towards which it can move, or from which it can recede in any direction, and, according to the supposition made, it is without motion. So Time is motionless within Eternity; as a unit with all its ages an infinitely small point, it neither recedes from, nor goes to another part of Eternity; nor does Eternity in any part draw nearer to, or recede from Time. There was no waiting in Eternity before Time was, and should

Space to Infinitude

Time end, there would be no recession of it, further and further away. All that can be said would be—"Eternity is—Time is and Time is not—Eternity is."

The same illustration may be used for the relation of Space to Infinitude. The infinitely fine point, motionless and without position in the Infinite Vacuum, might represent what we call boundless Space, with its innumerable multitude of worlds and clusters of worlds, poised within Infinitude. The point is not a part of the Infinite Vacuum within which it is; for it is infinitely small, without length, breadth, or thickness. So Space is not a part of Infinitude, in comparison with it, it is infinitely small without dimensions in any direction. As the infinitely small dot is within the Infinite Vacuum and yet "nowhere," so Space is within Infinitude and yet nowhere therein. Without occupying any of it, and without having any location within it, Space is within Infinitude, as Time is within Eternity without forming any part of it and without any location therein. And as the point is motionless within the Infinite Vacuum, so Space is without motion in Infinitude, there is nothing towards which it can advance, and nothing from which it can recede, and no part of Infinitude can draw nearer to Space, nor depart further away from it. Space is not encompassed by Infinitude, it is within it, but nowhere and motionless therein. Without the thought of "nowhere" and "motionlessness," the illustration would be in error. Space would be encompassed by Infinitude, whereas the undivided unity of Infinitude is at once and equally present with Space, and not partly upon one side, and partly upon another.

This illustration rightly held before the mind is certainly striking and impressive. A solitary point infinitely finer than the point of the finest needle, nowhere and motionless in an Infinite Vacuum without shape and

Not in Space as Body is

boundaries, representing Time in Eternity and Space in Infinitude. It is not, however, presented to enable us to form a conception of these things; this is impossible, but to show that all these transcend our highest thought, and to keep us from wrong thoughts concerning them, such as that Time is the same as Eternity and Space the same as Infinitude and that Time is a part of Eternity, and Space a part of Infinitude; that Time and Space are infinite, and that Eternity and Time have a relative motion, a going before and following after, while, in truth, Eternity is a *unit* at once present with all Time past, present and future, as Infinitude, an *undivided unit*, is at once present with all Space.

Another all important question here arises—What is relation of the Soul to Space?

SECTION VII THE RELATION OF THE SOUL TO SPACE

Here we must emphasize the essential distinction between the spiritual and the material. These are two different substances, each with its own peculiar attributes. What the one is the other is not. This is a fundamental Truth of all Science. Without its recognition all is necessarily confusion and error; because of the prevalent greater or less disregard of it, there is much in the present-day teaching, which is far from true. Both of these substances are within Space, but they do not stand related to it in the same way.

A material object occupies space, it has extension there, it is a part of Space. The human Soul does not occupy space; it has no extension. In regard to it we definitely know, that it is within Space, and that it is at present limited therein, by reason of its vital union with the body. But we ask is Space a necessity for it? Can it be out of Space, and if so, how are we to conceive of it in such case, and of its relation to other spirits in the

Prevailing Views

same realm? The answer to these questions must be that they are beyond the sphere of our mental power, because beyond all our experience. We are creatures of Space, and have no other experience than that of being within it. It is true that we cannot be beyond the realm of Time. This is because Time is, as we have seen, an attribute of all created being. While we have any being, we must be in Time. But we do not have any corresponding intuitive cognition of ourselves in regard to Space. It is not a characteristic, property, attribute of the spirit. As before mentioned, the disembodied state of the soul must be a profound mystery to us. Held, as we have been all our life long, within Space by vital union with the body, we cannot follow the free Spirit, when it goes forth upon the dissolution of that bond of confinement.

Being in Space, the simple question now before us is—What is the relation of the Soul to Space? The view of this, which has been generally held, is most indefinite and unsatisfactory. The seemingly absurd attempt has been made to confine the soul within some minute cell, or gland of the brain, the so-called seat of the soul, as though it were a minute, inactive, insignificant thing. Shut up within this innermost secluded cell, in some most inexplicable, inconceivable manner, by means of innumerable nerve filaments, the whole figured, colored, moving, complicated imagery and panorama of the world, with all manner of experiences and fellowship with other beings are transmitted to it; and by means of such filaments it, receiving all this, sends forth from its deep seclusion and close confinement, its thoughts and emotions, and executes its will. To this long prevalent idea the present physiological psychology appears to lend support, and with it seems to be inseparably connected.

Omnipresence of the Soul

It is, however, not too much to say that it is inconceivable and absurd. It is as absurd as the supposition that, when a message is sent the very words themselves are carried along the telegraph wire. The telegraph and this supposed nerve communication are in reality totally different. The former is only a means of long distance signalling. It can be done equally well, within seeing distance, by flash-light, and within hearing distance by tapping with the finger on a table. But in the hypothetical nerve system it is knowledge, imagery, figure, motion, sound, and hence the very things and the very words themselves which are transmitted.

Immeasurably more reasonable and superior is the view which we have always entertained. The relation of the Soul to Space is that of omnipresence within its own sphere. What that sphere is we may be unable to tell. It must have limits, for the human soul is not infinite; moreover by reason of its vital union with the body, it cannot depart entirely from within it. Filling the body with its omnipresence and bound to it, the limits of the body may form its boundaries, but not assuredly so; the sphere of its omnipresence may be as far as the activity of its being has power to be, and as far as it may go, or not go at pleasure, taking in knowledge, and exercising its power.

By omnipresence is meant the presence of the Soul in *its indivisible unity* at once in every place within its sphere.

Instead of close and secluded, obscure, solitary confinement within an insignificant brain cell, cut off from all beyond its narrow prison, receiving and sending communications through long lines of nerve filaments, the human Soul is omnipresent throughout the body, wherever there is the slightest nerve structure, perceiving and directing all things immediately for itself; present in one

Proofs

1 Alone Conceivable

place more than another, only as itself concentrates its activity and attention here and there. At once and equally present in both eyes and in every feature of the mobile face, it looks forth upon and dominates the world, revealing by every look and flash of the eye, and every expression on brow and cheek and lip, its thoughts, emotions, will, its real presence there, so that as friend looks into the eye and face of friend they see each one the other's soul, and, going forth to one another, soul touches and blends with soul—there is a real presence of the one with the other—a real presence, at that supreme moment, free from intermediation.

This is not a flight of fancy, it is that which men have often felt and delighted in. Surely we all have had something of the mysterious presence and blending of soul with soul. There are, moreover, a number of important considerations of a scientific character, by which this view of the relation of the Soul to Space is supported.

In the *first* place, this is the only conceivable relation possible. If we reject this, we have nothing whatever to put in its place. To say that it has a "ubi," that is a position, a location, without occupying space is simply to express its limitation; it does not tell what relation the soul has to the position within which it is. What is the antithesis to "occupying space?" All that can be suggested, beyond the mere negation of "non-occupying," is *omnipresence*. Our inability to think of any other relation does not, of course, in itself prove that there is none other; but it has this much of scientific force, omnipresence is a definite and reasonable relation, which the Soul may have to Space, and, in default of anything else, it should be accepted as, at least, reasonable and possible, and better than a total want of thought.

In the *second* place, omnipresence is required by the

2 External Perception

3 God's Image

true doctrine of External Perception, that is of the "Intuitive Cognition of the External World." We have above spoken of the seemingly inconceivable and absurd supposition, that the Soul is confined within a small cell, in the far interior of the brain, and that all our knowledge of external things is transmitted to it through long filaments of nerves; and in contrast, we presented the reasonable and true view, that the soul is present to, and cognizes the things of the external world immediately in themselves. This necessitates the actual presence of the Soul in the eyes, face, hands, etc. Without this the Intuitive Cognition of External Realities must be abandoned. All this will appear clearly, when we unfold the doctrine of Intuitive Perception.

In the *third* place, the omnipresence of the Soul is proved by analogy with the omnipresence of God. It is a scientific truth, as well as a truth of Revelation, that we bear the image and likeness of God. The fundamental truth of all knowledge is the essential distinction between the material and the spiritual. We are spirits and the Deity, the Great First Cause, equally with ourselves must be a Spirit. Being thus of the same substance with Him, we must have the same essential relation to Space that He has, the difference being, ours is finite, His is infinite. Such is the nature of His Being, that He is at once equally present through all Space, however wide-spreading it may be, and we bearing His likeness, spiritual as He is spiritual, must also be omnipresent to Space within the narrow limits of our finite being, and sphere. Herein we have again a positive proof of the soul's omnipresence.

In the *fourth* place, we have a proof from the Testimony of Consciousness, as far as we can discern and interpret it. It may safely be affirmed, that the supposition of the Soul as seated in a cell of the brain and receiving all things by transmission to it through nerves

4 Conscious throughout the Body

from a distance, has no warrant, nor intimation in Consciousness. When I "think," I am not conscious of any transmission to a posterior, or central cell of the brain. I am conscious only of activity in my brow, and in the anterior portions of the two hemispheres of the brain. When I "see," I know nothing of an optic nerve, and the passage of anything whatever along it, but I am distinctly conscious of sight in, or of seeing with or through mine eyes. When I "hear," I am only conscious of hearing in, or with mine ears. I know of no auditory nerve, bearing sound to me seated at some distance within. When I lay my hand upon and touch some object, there is no knowledge of any kind of transmission, the feeling, the perception is all at my finger ends. When I have a pain, or a perception of heat or cold in my foot, all the consciousness is in my foot, none whatever within the head. Thus it is in regard to every particular. In Consciousness every thing has its own place in the body, and we take knowledge of it in the place where it is.

Two reasons may be given, why we seem to ourselves to be within the head more than elsewhere. It is because in fact the head is by far the most important part of the body. Therein is the brain, the great and mysterious organ of thought; it is therein that we mainly do our thinking; there also are the great organs of sight, hearing, smelling, tasting, speaking and feeling with tongue and lips. Theoretically, we might dispense with all the rest of the body, if we could move with wings as cherubs and had some one to execute our will for us in place of hands, or if we could move or work by mere will-power. Because of this superior importance of the head, the soul's occupations, activity, attention, consciousness, is chiefly centered, but not confined there. As, at times, we may be all absorbed by one thought,

Why apparently in the Head

and oblivious to all else so, as a general rule, we have our attention taken up with the activity within the head. It is, as it were, the central station, or "head-quarters" of the omnipresent Soul.

The volitions, producing voluntary motions in the limbs, etc., may be said to go forth from the brain along the nerves, but not because any real "will" is thus transmitted, but simply because of the organic and mechanical construction of the body. The body is a unit, all the bones, muscles, tendons and nerves are bound together, as a piece of complicated machinery, and for all this the brain is the great centre or store-house of nerve-force. When we "will," the nerve-force corresponds, and there may be the activity of the nerve-force from brain to nerve centres, and through nerves along their course. But this is not mental or will power; it is only nerve-force. When we move the limb with the foot, if we observe carefully, we find that we discern, not transmission, but the chief concentration of consciousness within the head, and at the same moment a consciousness through the entire limb from the hip to the foot; the feeling and the effort are in these, and if we meet with resistance, we are conscious of greater effort within the muscles of the leg and foot. This has been called our sixth, or muscular sense.

The *second* reason why we seem to be within the head, more than elsewhere, may be because the brain is perhaps the place of the vital union of the soul and body, although we have no proof that it is such beyond the fact that it is the largest nerve mass. It may, however, be the case, that the omnipresent soul has a vital union also with other nerve centres and nerve filaments, or in other words, with the entire nervous system as a unit. But if this be the case, it would still remain true, that the brain is the chief part of the nervous system and the

Not Confined in the Brain

centre, as it were, of the vital union. Other portions of the system may be destroyed without affecting the brain, but injury to the brain impairs or destroys the activity of the rest, and serious injury to it is fatal. The vital union of the soul and body is, however, a mystery into which we cannot in the least degree penetrate.

It thus appears that Consciousness gives no indication that the Soul is confined within an interior cell of the brain, or even within the head, there receiving transmitted communications and sending its volitions to distant bodily organs and members. The distinct testimony of Consciousness is, that we are conscious in various parts of the body and at different places at the same moment; that in our volitions, moving our limbs and organs, we have a consciousness not only within the head, but also within the varied organs and limbs themselves; that the more distinct consciousness within the head is simultaneous with consciousness elsewhere through the body, and is simply because of the greater spiritual activity and attention there.

When we think of our presence, our persons, our very ourselves, we think of these as pervading our entire body, every part of which, animated by ourselves, is a part and a manifestation of ourselves, living, quivering, responsive to every thought, and emotion of our being.

Thus the Testimony of Consciousness is positively to the omnipresence of the Soul in Space, as far as we can discern and interpret it. It certainly is a fair supposition, that the Soul is present wherever there is consciousness, feeling, perception. As these overspread the body, they indicate the omnipresence of the Soul therein. It is curious to note, that the very place, called the seat of the Soul, where the whole Soul, with all its spiritual activity, is supposed to be confined, is the place of which we are totally unconscious, and of which men

Sensations from Lost Members

in general have no knowledge, nor thought whatever.

Possibly an objection may be made founded on the experience of individuals, who have been more or less maimed. It is said, that they refer sensations, etc., to the lost members, as though they were still living portions of the body; that they are still conscious of them.

The reply would be in the *first* place, that the alleged experience, properly scrutinized, is probably exaggerated, at least as a foundation for the inferences drawn from it.

In the *second* place, there is a misinterpretation of Consciousness, as is often the case. The individuals cannot be conscious of the lost members, as there can be no consciousness of that which does not exist. They are conscious only of sensations, etc., along the course of, or at the extremities of the severed nerves, and they misinterpret this, as being within the vividly remembered lost members. The vividness of the remembrance, and the former long continued habitual use of the lost members prevent them from doing otherwise. Indeed in thinking of the body, it is almost impossible for them not to think of it in its unimpaired integrity.

They are conscious of the entire remnant of the limb, as it now is; and in thought they reconstruct it; but in so doing they can originate nothing new; they can only reconstruct it after the form and fashion it formerly had.

Moreover, however much they may affirm that they are still conscious of the lost members, they know by *their own consciousness*, better than any can tell them, the great privation which is theirs. It must be remembered, that all the members of the body are part of our being, as we now are, and the natural, spontaneous, irrepressible impulse is to think of them, and use them as though they were all whole and unimpaired; but the impulse is checked by the *sad consciousness* of the contrary, if a member has been lost.

The Objection Answered

Any reference of the excitation along the course, and at the extremity of the severed nerves to the lost members must be of the most general and indefinite character; and very different from the conscious moving of the fingers, for example, the closing and opening of the hand, the turning of the wrist, the tactual perception of things by handling them, by the pressure of the hand and the intelligent, and adroit passage and play of the fingers and finger-tips upon, and along them. This is the character of the true consciousness of the member.

Our presentation of the case evidently agrees with, and explains the experience in question, as well as the supposition of transmission and reference, and thus destroys the force of the objection connected with it.

In the *third* place, the supposition of transmission and reference cannot be true because it makes Consciousness false and untrustworthy. According to it, Consciousness presents sensations, etc., coming from the ends of severed nerves as though they came, for example, from a lost foot. Here is positive deception. We have no Consciousness of nerves, nor of various divisions, and subdivisions of the brain. We are conscious only of sensations, etc., and if these be carried to the soul, confined within some cell of the brain, they can not be referred to the different parts of the body, from whence they came, unless they are presented in Consciousness as originating there. We are dealing only with Consciousness, and particular sensations, etc., must be presented by it as belonging to their own parts of the body, if they are to be referred to them. There is no other criterion, by which they may be, as it were, differentiated, assorted, and referred each to its own place. Hence if sensations, etc., be referred to a lost foot, or to some other lost member, Consciousness has made a false presentation, and its trustworthiness is destroyed. This, of course,

The Offspring of God

effectually removes the objection of which we speak.

We are now prepared to make a statement of "what we are"—of what "Man" is.

SECTION VIII WHAT IS MAN

Man is an Immortal Spirit, bearing the likeness of God, in vital union with a material organized body, within which it is omnipresent. The body is his garment and dwelling place, and also his organ, or instrument, by which he holds communion with the material world, and with his fellow-beings.

The body is dependent upon the indwelling soul, but the immortal soul is not dependent upon it. The Soul separated from the body lives, with the activity of its attributes, in the disembodied state, but needs the body for the fulness of human nature. The hoped for spiritual body is a material one; spiritual, not because possessed of spiritual properties, but so called, because far better adapted, than the present body, for the highest needs of the Soul and for the sphere of the Soul's exalted life hereafter.

In a strictly scientific sense, Man is the *Offspring* of God. God is the Father of his Spirit by a creative act, and the Former of his body.

It is a *scientific impossibility* for him to be evolved, or developed from an inferior being, or creature. Spiritually and bodily he must come from a *Superior*, or at the very least from an equal.

The First Man was fully endowed with all the attributes of complete, and highest possible human nature. Any lineal connection, which he may have with mere animal forms, denotes not his *origin*, nor procreation, but was only for the protection, and nurture of the new created being.

Man, himself, being a Spirit, it is the Soul, which

A Spiritual Cosmos

chiefly occupies our attention, and engages our investigation. Hence we must state the concept of it, which we should entertain.

The Human Soul.

The Soul is a real spiritual substance, endowed with its attributes, laws, forces, activities, precisely as is the case with all material objects. We may conceive of each individual soul, as in itself a Cosmos, corresponding with the Material Cosmos. Between these two, there is a very striking analogy, adopting, in a general sense at least, the Nebular Hypothesis of the origin, character and development of the Universe, and the law of the conservation, or persistence of force.

At the very beginning the Universe was an attenuated, diffused Nebula, inactive, dark, cold, but endowed with all material forces, laws, characteristics. These were all unmanifested. Step by step they acted, and reacted upon one another, and the present Cosmos is the result. Thus it is with the human Soul conceived of as a spiritual Cosmos. It comes into being endowed with every power, law and characteristic of human nature, but all these are unmanifested, and the soul itself inert, and a perfect void. But as the material forces began immediately, and at the first imperceptibly to act and react upon one another, so the powers of the Soul began immediately to do likewise. They act and react upon one another, at the outset in the most imperceptible manner, but gradually manifest themselves more and more clearly and fully, up to the complete development of the matured man.

The material Cosmos, apart from all forms of life, receives and needs, according to theory, no influence from without. Its forces are ever fully energizing; all rest being due to their equilibrium, as opposed to one

A Void

External Influences

another, and the Cosmos itself is ever tending to the the final darkness, cold and inactivity of the complete equilibrium of all its forces. Thus also the powers of the human Soul are ever energizing, their greater or less activity and rest being due, to the degree in which they are or are not held in check by one another, and they would at last fall into a state of abiding inactivity by reason of their complete equilibrium, were it not for influences from without. These the Soul, unlike the material Cosmos, needs, and is continually receiving. Deprived of all influences from the external material and spiritual realms, the Soul would never develop, and would forever remain a perfect void or blank. These influences come upon it through its vital union with the body.

The total void or blank condition of the Soul at the outset, and apart from all external influences, must be distinctly emphasized in order to form a true concept of the Soul. It comes into being with complete endowment of all its powers, laws, tendencies, character, but altogether without knowledge, fundamental truths, axioms, ideas, principles, necessary beliefs or judgments, "right and wrong," etc. It has none of these, not even in abeyance, and undeveloped, awaiting the proper development of power, and opportunity for their spontaneous manifestation. These are all acquired. In large measure they are from training, precept, education, given by others, and the adoption of the views, principles, example of those among whom the individual grows up. Apart from this, they are derived from the *intuitive* or *immediate* cognition of things of the external and internal worlds, as they are in themselves, and in their relations to one another; and the working up of this material by the discursive powers of the mind, acting according to the laws of their operation, just as the

Instinct

forces of Nature act according to their laws, together with the emotions, corresponding to the thoughts, ideas, knowledge thus formed and called forth by them.

By Heredity, and by Instinct, by one, or both of these, according as they are, or are not distinguished from one another, nothing more is done than to give endowment of power for certain things; an endowment, the possession of which prompts its own activity. Thus a great linguist may have a son of the same character, that is, a son who has the same linguistic ability, but no knowledge of any language. He acquires such knowledge only as he studies the languages, one after another. This is the nature of all "Instinct." Thus, for example, the Instinct of a bird to build its own peculiar nest, is simply the endowment of power peculiar for such construction. Possessed of this, at the proper time, with proper environment and material, the bird builds its own characteristic nest, guided, doubtless in good degree, by the prompting of its own needs, by the remembrance of the nest it occupied as a fledgling, and by the example and influence of older birds.

The character, or state of the Soul, being at the outset such as we have described, and the Soul being in vital union with a material organism, as yet immature and unborn, it may be taken for granted that its first experience is that of physical feeling. Thus we have Sensation presented to us for our consideration.

Intuitive Perception

CHAPTER IV

Sensation

SECTION I BODILY FEELING

SENSATION is a physical or bodily feeling. Not because that which is material is capable of feeling, but only because the body gives rise to, or is the cause of the peculiar feelings in question; these are themselves purely spiritual.

Sensation is simply the feeling of pleasure or pain. It belongs to the emotional powers of the Soul. The division of the powers of the Soul, which we adopt as the simplest and the best, is that which presents them in three classes—the Cognitive, the Emotional, the Voluntary, or Cognition, Emotion, Will.

The view given by Sir William Hamilton in regard to the nature of the Emotions seems to be perfectly satisfactory. The Feelings are, according to this, the Reflex of certain states or conditions of the Soul and of the Body. According to the very law of our being, when we have certain activities, there arise within the Soul certain emotions corresponding with them. They spring forth from these activities as the sparks spring from the glowing iron, as the smith strikes it with his hammer on the anvil; as the recoil of the gun when it is fired; the crack of the rifle; the spring and twang of the bow, as the arrow shoots forth from it; as the thunder which comes from the atmosphere, rent from cloud to earth by the flash of lightning; as the sighing and moaning of

Pleasure and Pain**Reflex of the Body**

the winds, as they blow through the trees of the forests and plains, or as the sweet music heard as they pass over the strings of the Æolian Harp; as the flash of light, from the impact of the projectile of a rifled cannon against the side of an iron-clad vessel.

The sensations are the feelings, which are the reflex of the varied activities of the body; they spring forth from them after the manner of the illustrations just given. That we should understand this is, of course, impossible. But, however deep the mystery, the fact itself is readily apprehended. Its possibility and its cause is the vital union of the soul and body, one of the most incomprehensible, and inexplicable of all the facts with which we are acquainted. All that we can say is, that there is such union, and that because of it, the varied activities of the body are accompanied by corresponding feelings within the soul. These feelings, it must be remembered are only feelings of pleasure and pain. The Sensations, therefore, are of two kinds, and of these alone. They are feelings of pleasure of every character, and of all degrees of intensity, from the slightest and hardly discernible to those which are most violent and excited; on the other hand, they are feelings of pain of equal variety, and of corresponding degrees of intensity.

While it is true that we cannot explain the mystery, its object and value are readily discernible. These feelings, springing from the activities of the body, are to bring the body under the control of the indwelling Soul, to protect it from harm, to secure proper attention to its wants, to afford enjoyment and to administer discipline.

The great principle, or law according to which the activities of the body have their reflex in the feelings of the Soul is, that which is detrimental to the body gives rise to feelings of pain, the suffering being greater, or less, according as the detriment is greater or less, and

Object

Pleasure, Bodily Welfare,

that which is physically beneficial gives rise to feelings of pleasure of greater, or less intensity, according to the greater, or less beneficent character of the bodily activity. All pain, therefore, is, as it were, a danger signal and a call for attention and care. The moment we have a feeling of discomfort, we know that there is something wrong. It may be a feeling of weariness; this is a signal that we are overtaking our strength, and a call for needed rest—it may be a feeling of hunger, or thirst; here again is a danger signal, the body is suffering from the want of food and water, and calls for a supply of these necessities. If these feelings of fatigue, hunger and thirst are extreme, it is because the body is in extreme want of rest, food and drink.

It is manifest that were it not for these feelings of discomfort, or pain we would never be aware of the condition of our body, and it might be greatly injured, and even die because of our ignorance and neglect.

So also the pains arising from cuts and bruises, and any kind of injury, and from sickness, disease, disorders make the presence of these known, and prompt us to give to them needed attention and treatment. Thus the well-being of the body is safe-guarded. Were not excessive heat and cold accompanied by pain, the body might readily be damaged, or destroyed by exposure to them.

The same thing is promoted by the feelings of comfort and of pleasure, arising from proper, normal, healthful conditions of our bodily organism. These feelings often amounting to what we call fulness of animal spirits and vigor, the very joy of living, give us the assurance, that it is all right and well with us physically, and prompt us to endeavor to keep the body in this condition.

It may be further noted, that so true is it that the reflex feeling of the harmful is pain, and of the beneficial is

Moral Government

Purely Spiritual

pleasure, that articles of food and drink, which are good for us have a flavor, which is agreeable, or pleasant, while those which are injurious have a flavor which is disagreeable or offensive; another illustration of the safe-guarding of the body. Again the sensations have a most important bearing upon the higher interests of the Soul. They contribute greatly to its Moral Government, affording a system of rewards and punishments. The disciplinary character and efficiency of bodily pains and pleasures, penalties and rewards, have ever been recognized and constantly employed. Indeed, it may not be too much to say, that without these the governing and training of individuals, and of our race would be well nigh impossible.

We have endeavored to give a precise and correct definition of the Sensations, and to emphasize the fact that they are purely spiritual, and are nothing more than feelings within the Soul of pleasure and pain; belonging to our emotional powers.

All this must be most distinctly apprehended, and in all our discussions of the Sensations we must rigidly keep ourselves confined within the limits thus laid down. This, however, has not been done by writers and teachers. The view which has always prevailed is in direct violation of the definition, which we have given. With strange inconsistency men accept, at least in a general way, the statement that the Sensations are *feelings*, and yet include within them that, which is not, and cannot be regarded as feelings. These have reference solely to pleasure and pain, and as Sensations are *feelings*, nothing can be included within them except the various kinds and degrees of pleasure and pain. With one accord, however, color, sound, perfume, flavor, softness and hardness, roughness and smoothness apprehended by touch, resistance perceived by muscular effort, and heat

“Senses” falsely so called

and cold have all been distinctly defined as Sensations; and we, it is affirmed, have the five Senses, that is Sensations, of sight, hearing, smell, taste and touch, together with a sixth more recently added, the muscular sense. All this has been so long and so firmly established in the minds of men, it has *been* so thoroughly regarded as indisputable truth, that to deny it may seem, at first, to be the wildest kind of folly. Yet such denial must be distinctly made. These five or six so-called Sensations are in no way whatever Sensations, and the five or six Senses, which we are said to have, are senses falsely so called.

This is perfectly evident.

In the first place, Color, perfume, flavor, sound, roughness and smoothness, resistance can by no possibility be regarded as different kinds and degrees of pleasure and pain. The mere suggestion of such a thing is a manifest absurdity. We are not now speaking of that to which they may give occasion, or to which they may give rise, but of these very things themselves. Nor are we at present speaking of them as scientifically explained, as that they are produced by vibrations of the Ether, or some kind of chemical, or mechanical activity. We are considering that which is within our actual experience, and which we recognize as Color,—red, yellow, blue and their combinations orange, green, purple, white,—the perfume of the violet, the rose,—the flavor of the peach, of the lemon, of sugar—the sound of human speech, of music, and the unnumbered voices of Nature,—the actual character of surfaces revealed to us by touch,—resistance offered to muscular effort. We simply ask, what are these things which we thus name, with which we are all so familiar in our every-day experience and which by irresistible impulse, and invariable conviction are universally regarded by men as existing through

1. Hot Pleasure and Pain

the entire realm of Nature. The sky is itself blue, the grass and the trees are themselves green, the snow itself is white, the far-off sun and moon are golden,—the sweetness is in the violet and rose, the flavor is in the fruit, the myriad voices of Nature are themselves everywhere present throughout its entire realm, surfaces have the peculiar character which we suppose they have, there is actual force resisting our muscular energy. When we think of these familiar things, prevailing everywhere around about us, and afar off to greatest distances, according to the common judgment of mankind, we may well ask by what possibility can these things themselves be included within our Sensations, and thus made to be *feelings of pleasure and pain*, emotions within the Soul, purely spiritual in nature and character?

This is the inevitable result, if these things be classified among the Sensations, and if we attribute to ourselves the five, or six so called senses. Red, yellow and blue, the sweetness of blossoms and flowers, the rich flavor of fruits, the sounds re-echoing through Nature have no external reality, they are emotions of pleasure and pain within the soul of man, and the world is despoiled of her own inherent beauty, loveliness, and music, her spangled heavens, her dome of blue, her garment of many colors, her rainbow tints, her glories of sunrise and sunset are taken from her, her many voices hushed and perfect universal silence made to reign perpetually.

In the second place. It is evidently impossible to regard these things as Sensations because to do so is to ignore the fundamental distinction between the spiritual and the material and to attribute qualities, or affections which belong to the latter of these to the former. These things are realities and being such they must be the qualities, or affections of either the one or the other of

2. Not Spiritual, but Cog=

the only two substances. They must belong either to the spiritual, or to the material; it is impossible that they should belong to both. The simple question, therefore, is to which of the two substances are we to attribute them.

The mere statement of the case reveals the absurdity of attributing them to the Soul. If they are qualities, or affections of the Soul, the Soul itself must have their very character. If we affirm that color, such as red, yellow, blue are qualities of the Soul, the Soul is itself a red, yellow, or blue soul, when and according as it has the experience of these colors. If we affirm that perfume is a sensation, or emotion of the Soul, and hence one of its qualities, or affections, the Soul itself must be possessed of and redolent with the various perfumes with which we are familiar, according as it experiences one, or more of them. If flavor be a quality of the Soul, the Soul must itself be flavored with the flavor of the peach, of the lemon, and must itself have the sweetness of sugar, when we experience these flavors. If sound be a sensation, it also must be a quality of the Soul and the Soul itself must be sounding with every sound whatever it be, which we experience; thus we would have a loud sounding or low sounding soul, a sweet, or a harsh sounding soul. Here we might add, that we would also have a hot soul, and a cold soul; if heat and cold be sensations and hence spiritual qualities. The statement of these manifest absurdities reveals them as such. Being stated, they are regarded as absurd by the universal judgment of mankind. No one would for one moment be persuaded to believe, that when we look upon the beautiful red and fragrant Rose, the beauty, color and fragrance are not in the Rose but in the Soul; that it is the Soul itself that is beautifully red and sweetly fragrant.

The reason why these statements are manifestly absurd

nized as Material Qualities

according to the common judgment of men, is because they by infallible, intuitive cognition perceive the real and true character of these five, or six so-called sensations. They immediately recognize them as belonging to the material world, as being qualities of that which is material. Men, therefore, at once perceive the absurdity of attributing to the Soul qualities which belong only to and inhere only within the substance which we call Matter.

It is by infallible, intuitive cognition that we draw the line of separation between the spiritual and material substances; a demarcation, which is absolutely essential for all true knowledge and science. And it is by this same cognition that we place the qualities, of which we are speaking, among the qualities belonging to the external material world. Hence it is if we rank them among our Sensations, which are purely spiritual, we not only ignore the essential distinction between spirit and matter, but actually confuse them together, by attributing the qualities of the one to the other.

Men are actually guilty of making this fatal confusion. They affirm that these qualities, color, etc., are sensations, that is qualities of the Soul, and having done this, they make their error a double one by referring them back again as qualities of the material world. This by very necessity they are compelled to do; for the only conception, which we have, or can have of the world, is that which is composed of these five, or six so-called *sensations*. Take this away and all is a perfect blank.

In the *third place*. The reference of that, which we perceive by our so-called senses, to our Sensations is due to the failure of proper insight and discrimination and want of correct analysis. Men have signally and strangely failed to discern the true nature of that which is before them, for study and explanation. Our Percep-

3. Bodily Affections Material

tion of the External World is of a complicated character. To understand it aright; there are three discriminations to be made. In the *first* place, we have the external world which lies outside of and beyond our bodies; in the *second* place, we have the external world formed by and consisting of our bodily organisms; this is as truly the world of the *non-ego*, as the former one is; in the *third* place, we must recognize the presence of both perception and sensation, and perceive the true character of each of these. The great fault of men has been their failure to make and appreciate these distinctions.

The external world being outside of and beyond our bodies is, of course, fully recognized as such. But it is otherwise in regard to the perception of the external world, which is within and which consists of our bodily organism. It has not been fully and distinctly treated as belonging to the material world, the *non-ego*. It is indeed in vital union with the indwelling Soul and, in no mean sense, is a part of ourselves, yet it is itself a truly material organism and all its qualities and affections are of a strictly material character. These, however, in the words and thoughts of men seem to be attributed at one time to the Soul, and at another to the mere body itself. Repeatedly men seem to have thought, that by showing something to be a bodily affection, they thereby showed it to be subjective, that is an affection of the Soul. If, for example, they regard what we call heat and cold as feelings of the body, they seem at once to refer them to the Soul as affections belonging to it, making them thoroughly subjective, and saying "*I feel hot*," or "*I feel cold*," and even "*I am hot*," or "*I am cold*," as though the very Ego itself were hot, or cold.

And so also with the other so-called sensations. They are first made sensations of the body and then transferred to feelings of the Soul. So definitely has this been done,

Wrongly made Spiritual

that it has been said, that were our bodies furnished with new sensations to be excited, or called into play by the influence of the external world upon them, our experience would thereby be enlarged and enriched, the new experience, except as to exciting influence, would be purely bodily and subjective. Whereas, it should be said, were we gifted with new powers of cognizing the realities of the external world, our experience would thereby be enlarged and enriched by new *knowledge* of that world, and by the reflex emotions within the Soul, due to such deeper and fuller knowledge.

We mention these two contrasted suppositions to show the two different points of view, the false and the true. The first may be designated "*Sensational*;" the second as "*The Cognition of Realities*." Also to emphasize the fact, that the body with all its qualities and affections must be carefully and rigidly discriminated from the Soul, as belonging to the world of the Non-Ego, and that the so called sensations, even though they were mere affections of the body, *which they are not*, would not and could not be feelings of the Soul, they would belong to the external material world, the true nature of Sensations being distinctly borne in mind; they are purely spiritual, being simply feelings of pleasure and pain.

Men have also failed to understand and analyze aright our acts of external perception. Proper observation will show, that in all such acts there are two elements present. The one is the cognition of external reality; the other is a feeling of pleasure, or pain. Of these two the former is the all important and the pronounced one; the latter, in all ordinary and normal acts, is altogether inferior and subordinate. The former is true external perception, the latter, the feeling of pleasure, or pain, is sensation. Men have signally failed to observe and make this distinction, and have regarded both of these as be-

Cognition and "Pleasure and

longing to our sensations. Hence it is that color, sound, perfume, flavor, heat and cold, touch, etc., have all been placed among the sensations, instead of being regarded as perceived realities of the external, material world.

Abundant and self-evident illustrations may readily be given, showing the presence of cognition and the feeling of pleasure or pain in our acts of external perception, and the true nature of both of these according to the infallible testimony of Consciousness. Thus, for example, by sight we at once perceive color, such as red, yellow, blue, etc., and have in some measure a feeling of pleasure or pain in so doing. That the color is an objective reality is the distinct affirmation of Consciousness. It is cognized always as external, as having outline, or shape, as of greater or smaller size and as capable of and possessing motion; it is also distinctly recognized as a quality of that which is material. With this cognition of an external reality, we have a feeling of pleasure, or pain. The familiar proverb expresses it, "It is a joyful thing for the eyes to behold the light of the sun." It is disagreeable and painful to be shut up in the dark. Light of a certain tone of coloring and of a certain character and degree of brightness is pleasant and welcome, while light of a different tone of coloring and brightness is unpleasant, and may be very trying and painful, we instinctively shield our eyes from it. It is too painful for us to gaze steadily at the electric arc-light, or at the unclouded noon-day sun. So also some colors and combinations of colors afford pleasure, and other colors, and combinations of colors are unpleasant and annoying. All this is self-evidently true and is in accord with the common judgment of all men. In vision we have the cognition of external reality and a greater or less feeling of pleasure or pain. The former is perception, the latter sensation; they are and must be kept, distinct and separate.

Pain" in External Perception

Precisely the same thing is manifestly true in regard to other acts of external perception. Thus the infinitely numerous and varied sounds and combinations of sounds, which come to our ears we cognize as objective realities, and we experience as something distinct from the sounds themselves the feeling of pleasure or pain, according to the character and intensity of the sounds. Some sounds being of such a character, that they are grateful and pleasant to us; pure tones and true music affording intense, joyful, inspiriting emotions, and sounds of a different kind are distressing, disagreeable, painful.

The innumerable perfumes, which reach the nose, are also cognized as external realities, and are pleasant, or offensive according to their character and the way in which they affect us; some persons delighting in certain perfumes, and others having a preference for perfumes of a different kind.

By tongue and lip we cognize the various flavors with which we are familiar, and in so doing have a pleasant, or offensive feeling, according to the character of the flavors.

By touch and by muscular energy we cognize objective realities and their character as rough and smooth, large and small, round and angular, having force and motion, as hot and cold, and with this we experience pleasure or pain, according to the character of these external things.

Thus it is self-evidently true that proper discrimination, insight, and analysis will prevent us from confounding perceptions and sensations, and from regarding and enumerating the five or six so-called sensations, color, sound, etc., as such.

In the *fourth* place. If color, sound, perfume, etc., be sensations, there is no escape from *Idealism*. The positive and distinct testimony of Consciousness is, that these things are the qualities of the objective external, material

4. Idealism

5. External Per-

world; there is a blue sky over our heads; there are radiant glories of sunrise and sunset on the heavens of the far-off eastern and western horizons; green is spread as a carpet upon our lawns and fields and we tread upon it with our feet; the color and the sweetness are in the Rose, which we hold at arm's length, and we cognize them both; sounds, rising, falling, varied, belonging to and characteristic of the world, come to us from every quarter. Such is the testimony of Consciousness, and if this be rejected the foundation of all knowledge is destroyed. *This is the only assurance that we have of the reality of the external world.* If these qualities be subjective and ideal, such also is the world, except as an *assumed*, or supposed *occult* cause of these affections within ourselves. It is doubtful if we even could affirm the reality of any such cause, or of any externality whatever. And, as our only conception of the external world is that which is composed of these qualities, that conception must itself be purely ideal, if such be their character.

We are thus manifestly shut up to "*Idealism*," if we regard the so-called sensations, as truly such.

In the *fifth* place, we cannot regard these qualities as sensations and accept the true view of External Perception, which is that we have an intuitive, immediate, infallible cognition of external realities themselves. *By consciousness we see that which is.*

This theory of External Perception requires, and is founded upon the supposition, that color, sound, perfume etc. are themselves qualities of the external world; to make them sensations is to destroy the theory.

It seems almost incredible that such men as Reid, Stewart, Hamilton, McCosh and others, who with great praise and credit to themselves have wrought out this doctrine of External Perception, should have destroyed the beautiful work of their own hands by their inconsis-

tent theory of Sense-Perception, Sensations and the Primary and Secondary Qualities of Matter. If our bodily organs are organs of Sense, if that which we perceive by them be through sensations, and if these be wrought in us by occult secondary qualities of matter, the doctrine of the immediate cognition of the external world is destroyed. The only explanation of the enigma is, that these men in arising from the errors of the past, failed to free themselves perfectly therefrom and to stand in the full possession and enjoyment of the light of their own kindling.

SECTION II THE LOCALIZING OF SENSATIONS

The simple and familiar fact is, that when we have the feelings of pleasure and pain, we at once locate them in their various places in the body. We do this correctly and without thought, or hesitation. Thus we say, "I have a pain in my head;" "I have a pain in my foot, or hand, or arm, shoulder, or back," etc. Here the interesting, but difficult question presents itself—"How do we do this?" When the Soul has the sensation of a pain, or pleasure, how does it know from what part of the body it comes?

The prevailing explanation is mystic, complicated, unscientific and altogether unsatisfactory. The Theory is that the Soul, confined within some innermost cell of the brain, is in communication with every part, or point of the body by an innumerable multitude of nerve filaments. When an impression of any kind is made upon the extremity of one of these, it is immediately carried to the brain and there communicated to the Soul; the Soul having this experience, refers it back to the part, or point of the body at the extremity of the affected nerve.

In this there is no explanation of the difficulty; not even an attempt to give one. The simple statement is

Prevailing Theory

made, that the Soul, having received an impression, localizes it at the extremity of the affected nerve. But the question is how does it know from what part of the body that particular nerve comes? The Soul, situated at some point in the brain, is supposed to be in communication with an innumerable multitude of nerves; these are essentially all alike, how does the Soul differentiate them? How does it do this so definitely and accurately that, notwithstanding their great multitude and similarity, the moment any one of them is affected, the Soul knows from what part of the complex body that nerve comes, whether it comes from the extremity of the right, or of the left foot, or from a particular finger of the right, or left hand, or from some nearby point on the face, as the forehead, or chin. One would suppose that the Soul would be in a perfect maze of inextricable bewilderment. To differentiate, assort, arrange these innumerable minute nerve filaments and become perfectly familiar with each separate one would be a Chinese-Puzzle of the most intricate and insolvable character.

Indeed, it would seem that the Soul is left altogether destitute of means of distinguishing between the nerve filaments and of determining from whence they come. At least no such means is mentioned, or suggested. This is the reason why we have called this theory "mystic," all is left mysterious. The Soul is endowed with some kind of mystic, or supernatural power, or insight by which, shut up within a deep recess of the brain, it knows the location in the body of the extremity of each of the innumerable nerve filaments presented to it. Certainly nothing by way of explanation could be more unsatisfactory than this.

Moreover, this theory is altogether gratuitous and has no foundation in the Testimony of Consciousness, and

Mystic, Unscientific

hence is unscientific. Consciousness knows nothing of the transmission of feelings from the extremities of nerves to the brain, of their communication there to the Soul and of their reference back to the nerve extremities from whence they come. Consciousness knows nothing of innumerable nerve filaments with which the Soul has to deal. It knows nothing of the division of the brain into two hemispheres, the right and the left; the one for the nervous system of the one side of the body and the other for the nervous system of the other side: and it is a matter of surprise to all, when told, that, contrary to natural expectations, the left-side hemisphere of the brain is for the right side of the body and the right-side hemisphere for the left side. A fact which, altogether unknown, would seriously add to the difficulty and bewilderment of the Soul, which we have mentioned.

We certainly throw no discredit whatever upon the achievements of "Anatomy" and "Physiology" in unfolding the wonderful construction and activities of our bodily organism. These are perfectly marvellous. Nothing can be more admirable than our intricate and complicated nervous system, with its innumerable and finely divided nerve filaments, ganglia, nerves, cords and cells, with the curiously constructed brain. And we may most readily admit, that all these are bound together as a unit and that there is a nervous force, excitement, or activity flowing, or pulsating, as it were, throughout it all and that, the brain being the great centre and base of the whole system, supplying, maintaining, controlling and unifying the nerve force, whenever there is excitation of any nerve extremity there is an impulse communicated to the brain and a return impulse received from it; and that this is so definite and real, that the time for the passage of the impulse from extremity to brain and return may be and has been measured.

The True Explanation

But it must be remembered, that all this is purely physical, material; it belongs to the world of the "non-ego" and although the Soul is in vital union with it, controls, guides and utilizes it, it must not be allowed to fashion and determine our conception of the Soul, of its powers and its activities.

Because there is upon the excitation of a nerve extremity, a nervous impulse to and from the brain, it by no means follows that there is a transmission of an impulse which is or becomes a *feeling of pleasure or pain*, along the nerve to the Soul within the brain, and the reference by the Soul of the feeling back to the nerve extremity. The difficulty and absurdity of such a supposition we have pointed out. The qualities, affections and activities of the body are in themselves material and must be distinctly and rigidly kept separate from those of the Soul, which are purely spiritual. To know and understand these latter, we must learn from and depend upon the Testimony of Consciousness. *Rejecting*, therefore, the *prevailing* theory of the localizing of the Sensations as untenable, we turn to the Testimony of Consciousness for *the true* explanation.

We have already pointed out, that according to this Testimony, the Soul is omnipresent within the human body. It is not something extended and diffused and thus spread out over, or through the body, but it is its own one, indivisible self that is at once every where present within the body; as truly in the feet and hands and elsewhere, as in the head or brain itself.

Being thus omnipresent, the Soul cognizes, or takes knowledge of the body; by touch and visual perception of its own body and by handling and seeing the bodies of its fellow-beings it becomes perfectly and intimately familiar with every part, feature, member, joint, etc., of the body. It knows its size, its shape, its movements,

Omnipresent Cognition

its capacities, its activities. It is true that there are certain parts of our body with which we are not so well acquainted. But this is because they are in a measure shut off from our powers of *perception*; we cannot handle and see them. These internal organs, such as the heart, the stomach, kidneys, etc., have been made more definitely known by the teachings of "anatomy." But even of these we are not wholly ignorant, they in some measure reveal themselves to our perceptions.

Being thus familiar with the bodily organism and everywhere present within it, the Soul experiences a feeling of ease, contentment, pleasure, animation, which is the Reflex of the healthy and vigorous activity of the body.

" It is sweet to breathe freely the balmy air,
And walk where we will at morn, eve or noon,
When the step keeps time with the bounding heart,
And the strings of life are all in tune."

And it experiences a feeling of depression, distress, which is the Reflex of a general disorder of the body. The Soul is conscious of this twofold experience, and recognizes its character, as a physical feeling, that is as one arising from the state of the body.

And as with the body in general, so also in regard to its various parts and members. Present within each one of these, it takes cognizance of its character, condition, activity and experiences a feeling of pleasure or pain, as these are of one kind, or another and by touch, sight, movement, experiment it obtains deeper insight and fuller knowledge of the feeling and confirmation of its assurance of its place, or point of origin. Thus, for example, if we have a cut, or a sting on the tip of the little finger, the Soul, present at the finger end, perceives that something has there touched and wounded the body; it feels the pain and, upon looking, sees the mark

Presentation of Known Facts

and by touching and pressing it with another finger increases the pain and determines the exact spot. Or if our hands and feet be too hot, or too cold, the Soul, being within the hands and feet, cognizes the degree of heat and cold and experiences the reflex discomfort or pain arising therefrom.

To sum up all and give a definite and concise statement, we may say that we localize our Sensations through the omnipresence of the Soul, in virtue of which it is present in the affected part, or member of the body, cognizing its character, condition and activity and there experiencing the reflex feeling of pleasure, or pain arising therefrom.

We fully acknowledge, that we herein have a deep mystery, altogether beyond our power of understanding. But this explanation has the advantage that it is the presentation of known facts; facts known by the Testimony of Consciousness; that it is a statement of that which may readily be conceived of as real; the conception is a very simple one, that of the Soul's presence throughout the body taking cognizance of its every part; and that it is in wonderful accord with "common-sense," that is the ordinary opinion of men. If they have a pain in the head, the hand or the foot, they will affirm "I know it is there, *because I know it.*" They cognize the fact; this is their simple and only Consciousness. All this is in striking contrast to the difficulties connected with the prevailing theory which deals with *assumed* facts for which there is no testimony of Consciousness, presents that of the possible reality of which we can form no conception and is contrary to the ideas of ordinary men.

SECTION III PRIMARY AND SECONDARY QUALITIES

The division of the qualities of Matter into Primary and Secondary should be laid aside as unfounded and

Unfounded—Wrong

useless. It was devised, and has been maintained for the sake of the prevailing theory of Sensation and Sense Perception and of course falls together with it.

According to this division, the Primary Qualities are those which belong to material objects in themselves; the Secondary are those having reference to our organism, those which are the occasion, or cause of our sensations, such as color, sound, perfume, heat, etc., but are in no respect like unto them.

This is contrary to the testimony of Consciousness, which affirms that these so-called Secondary Qualities belong to the material objects in the same sense as do the Primary Qualities. As I sit by my fire and *perceive* the warmth in my limbs, I know that the heat is also in the fire itself and more so than it is in my limbs, because *there* it is the more intense; the nearer I draw to the fire the greater is the heat, and because it is from the fire that I obtain the heat, which I *perceive*; which I cognize as an objective reality. We have, however, already dwelt upon this testimony of Consciousness.

In the *second* place—The division of the Qualities of Matter into Primary and Secondary is wrong in itself and rests upon a false principle. It supposes a distinction between the body and other material objects, which does not exist. It assumes that these objects act upon the body as they do not on one another; that the body does not act upon them as they act upon it, and as material things act and react together. Or, in other words, the assumption is that the body does not strictly belong to the material world, the world of the non-ego.

When we claim that other objects act upon the body, as they do upon one another, it is not meant that the effects are altogether the same. The effects of the interaction of objects are as varied as are the objects and the circumstances under which they act. The meaning is,

Destructive Confusion

that all these activities are of material forces and laws. These forces act within the body under the influence of the indwelling Soul, but the peculiar effects, thus produced, are as truly material as are those resulting from electricity, steam, etc., as utilized by man.

In the *third* place. The principle upon which the Division rests is false, because it involves the confusion of the spiritual and the material. The Secondary Qualities are supposed to affect the *living* organism. But the affection does not belong to the organism itself, as it is not sensitive, but to the Soul, for it is the Soul which feels it and apart from the feeling of the Soul it has no reality, there is nothing in the body, nor in the world which corresponds with it. But at the same time it is not an affection of the Soul, but an affection of the organism, because it is the organism which is affected by the secondary qualities and apart from it the affection thus produced cannot be. It seems to be a "*tertium quid*," something which is neither material, nor spiritual. It is not a quality of the body, nor is it a quality of the Soul, and it is a quality of the body because it is an affection of it and it is a quality of the Soul, because it is a feeling of the Soul.

Here certainly we have confusion which is thoroughly destructive.

The confusion is all the more apparent from the distinct affirmation, that it is not the dead, but the *living* organism which is affected by the Secondary Qualities; these produce no sensations, or affections in the dead body. But what is Life? What is the *living* organism and to what do its affections belong? Are they the affections of that which is material, or of that which is spiritual? Or is Life a distinct reality and have its affections a real being, or are they the affections of a composite of Soul and body?

Claimed as Decisive

Here every thing is undetermined and all is a maze of confusion; body and spirit are hopelessly intermingled and the fundamental Truth of all Science destroyed. Spirit and Matter are and must be held distinct from one another. Vitally united, they still are parted by an impassable gulf of separation.

The confusion, thorough and destructive, involved in the Division of the Qualities of Matter into Primary and Secondary, is in striking contrast to the simple and true statement, that Color, Sound, Perfume, Flavor, etc., are qualities of material objects, which we cognize by our powers of intuitive perception.

SECTION IV OBJECTIONS FROM PHYSIOLOGY

These have been regarded as decisive. It is affirmed, that the nerves of the special senses have no feeling of pain; that each one is susceptible of its own peculiar affection, and that this may be induced by any kind of excitation, or at least by a number of different kinds. It is said, moreover, that these peculiar affections can be experienced only by their own nerves, and that the very same kind of excitation may induce them all if applied to the appropriate nerves. From this it is deduced that color, sound, perfume, flavor, etc., are simply affections of the corresponding nerves, when excited by one stimulant or another. Thus, for example, the optic nerve will give the sensation of light and color if stimulated by the sun, or galvanism, electricity, pressure, a blow, perhaps even by some diseased, or abnormal condition of the organism. The auditory nerve will give the sensation of sound, if in any way it be stimulated, perhaps even by the same or some of the same agents which excite light or color in the optic nerve. So also the olfactory and gustatory nerves give us the sensations of perfume and flavor; and the same thing is true of the other senses.

Recent Introduction

In reply it may be said that all this is probably exaggerated and that there are certain facts, or intimations in what is called the evolutionary history of the "special senses" from their first beginnings in the lower creatures to their perfected forms in higher animals and in man, which may be regarded as indicating that these "sensations" have not always been and are not *necessarily* confined to special nerves. It may, *perhaps*, be that they were, some, or all of them, at one time more or less diffused over the entire body and that their present concentration in the higher animals and in man is a recent introduction. The true name of these so-called sensations is "*perceptions*."

In the *second* place, it must be remembered that we only know *that things are*; we do not know what they are in themselves.

Thus we know that Light is, but we do not know *what* Light is, beyond the simple fact that we cognize it. Scientists tell us that it is a certain degree of velocity in the vibrations of the Ether. But what is the Ether and what causes its high velocity of vibration? And how does this differ and does it differ from galvanism, or electricity, or from nerve vibration from a sudden blow, or from some other cause?

Moreover, we know that Light is produced by different agents or in different ways. It came at first as "Cosmic Light," the faint increasing glow of the original universal Nebula, as it began to move and condense; it shows itself in the tail of the comet millions of miles in length and so attenuated that faint stars are seen shining through it; it starts forth as dark meteoric stones are caught in the earth's atmosphere and dart through it all ablaze; it comes from the intense, incandescent gases of the sun's photosphere, produced by meteoric showers falling into the sun, by chemical

Various Sources of Light

and electric activity, or by the contraction of the sun itself; it comes from the violent union of oxygen and carbon in the combustion of wood, coal, etc.; it comes from the incandescent filament in the glass bulb of the Incandescent Electric Light; from the brilliant piece of lime in the flame of the oxyhydrogen blow-pipe; from a piece of potassium thrown and floating upon water; it shines from the unconsumed points of carbon in the electric arc-light; it springs from the leap of the electric current over the intervening space in the conductor along which it flows, or as it flashes through the air from the cloud to the earth; it comes from various galvanic and chemical activities, from the blow given by the projectile of a rifled cannon as it strikes the armor of an iron-clad vessel; it comes in showers of sparks from the friction of the iron brake, as it presses heavily upon the iron wheels of the railroad car and as a piece of steel is held firmly against the rapidly revolving grinding-stone; it starts forth as the horse strikes his iron-shod foot against the granite stone pavement; as the flint and steel of our forefathers' "tinder-box" are struck upon one another and in the spark of the old flint-lock gun when fired; and as by rapid skillful movement the barbarian rubs and moves two pieces of wood upon one another; it arises from fermentation and the process of decay, as when heaped up piles of fresh cut grass burst into flame and as the "ignis fatuus" springs forth from and hovers over swamps and marshes; it appears in the pulsating tints and streams of the northern lights; in the glowing vapor arising from sticks and pieces of phosphorus; in certain chemical fluids when shaken together in a bottle in the dark; it is seen night after night in self-luminous paint; it shows itself in the fire-fly and glow-worm, at once the wonder and the despair of the scientist; in the curious light, which by a long handle

Retina and Light Physical

certain creatures of the dark deep oceans hold over their head for their guidance, or for their protection; it arises mysteriously, filling us with wondering admiration, from the wide-spreading phosphorescent waters of the sea through which ships and steamers plough their way in the silent watches of the night; and it appears to be in some way the product of infusorial life and activity; in an awe inspiring manner, it flames from the eyes of lions and tigers and other beasts of prey, like moving coals of living fire; and it has been claimed that the human eye itself has a luminosity of its own.

All these numerous and varied agents and activities from which light springs are physical and are involved in deep, impenetrable mystery. It is not strange, therefore, but in accord with all this, if Light be produced within the optic nerve, or rather and chiefly within the retina by various and dissimilar agents, *the nerve, retina and the Light all being physical*, and, *being there an objective reality*, is cognized by the present indwelling Soul, no matter by what agent the Light be produced.

May it not even be that, as luminous paint has a glow of its own, as have also the fire-fly, the glow-worm and the deep-sea creature, as the eyes of beasts of prey shine with inherent light, as there is phosphorescence of seawater, phosphorus, infusoria, the human eye has, as has been claimed, light within itself; it may be that it absorbs and retains, in some measure, as in a store-house, the light which is poured into it all through the bright hours of the day and the hours of artificial illumination, as electricity is within the storage-battery and as seems to be the case with self-luminous paint. As a familiar matter of fact, we know that light is absorbed and retained by the retina. This gives the brilliant, changing colors, which we cognize when we shut our eyes after looking at the sun and which remain for quite a long

Refined World for the Soul

time; and produces what is called the persistence of vision, which has been utilized in the revolving toy with moving figures and in the kinetoscope. Still further as certain chemicals shaken in a bottle become luminous, why may not the optic nerve and retina become so upon excitation in one way or another?

In the *third* place, it must be remembered, that there is a gulf of separation between the spiritual and the material and that the purpose of the body is to bring these into communication with one another. The Soul has the power of cognizing external, material realities, but this power is of a very limited character. The ordinary material world is too large, too gross for the Soul to deal with it immediately. There has been prepared for it, therefore, a material world of extreme refinement and delicacy in substance, structure and force. This is our entire nervous system, and of this system there are special parts, which have been made and fitted for special purposes. There are the voluntary nerves with a delicate nervous force within them, which corresponds with the mandates of the Will. The simple fact is, that we "will" and this force obeys; we "will" and it is done. The Soul has not sufficient power of "Will" to control other material forces, so that they all immediately obey its mandates, but it has power over the delicate, refined, specially prepared nerve forces. So also there are other nerves, which have been wonderfully constructed and prepared to bring the Soul into immediate contact with certain qualities, aspects, or phenomena of the material world.

Thus the optic nerve, but rather and especially the retina has been fitted to bring the Soul into immediate contact with and perception of visible objects, or with light and color. Those who have made of the retina a careful examination, have described its marvellous, deli-

Retina made for Light

cate and complicated structure, finer by far than the finest mosaic work of human art and skill. It is upon this that light and color fall and the Soul cognizes the illuminated piece of delicate workmanship.

This wonderful construction together with the optic nerve connected with it being the special apparatus to bring the Soul into contact with light and color, it is not at all strange if the perception of light and color be confined to it. The very fact that we have this wonderful optical nerve construction may be regarded as proof, that our perception of light and color must be through it and through it alone and not by other nerves, which have been constructed for other purposes. The instruments, which men have devised, are useful only for that for which they were intended and made. *To see* we do not use the ear-trumpet, the telephone, the phonograph, the speaking tube, the flute, the cornet, the violin, the organ, the thermometer, but eye-glasses, opera-glasses, binoculars, the stereoscope, microscope, telescope.

These, and other optical instruments, greatly aid and enlarge our power of vision, the purpose for which they were designed and made, but are useless for every thing else and they cannot be supplanted by instruments made for other purposes. And even among themselves, each one is of use only for its own particular purpose. The telescope cannot take the place and do the work of the microscope, nor can the latter do the service of the former; the stereoscope performs a work altogether peculiar to itself. It is in accord with this, if the optic nerve and retina are fit for and only for bringing the Soul into contact with and perception of light and color, while the no less wonderfully and delicately constructed auditory nerve and ear are to bring the Soul into contact with and perception of sounds, which would without these be too great and gross for the Soul to touch and

Other Organs for their Purpose

cognize. The fact that they have been constructed for vision may be taken as proof, that they have *thereby been made* unfit for anything but light and color.

The force of what we have said may be augmented by a similar consideration of the other organs of external perception. We might point out, that what is true of optic nerve and retina is true of the auditory nerve apparatus, of the olfactory and gustatory nerves and the nerves of perception by touch. The facts, which we have mentioned in regard to light, we might show to be true of sound, perfume, flavor and that which is apprehended by touch; these are material qualities, aspects, or phenomena of the external world, which may be produced by different agents, or in different ways; and special nerve constructions are the delicate and refined means of bringing the Soul into contact with and perception of these things, no matter how they may be produced, or made manifest; and each nerve construction is for its own peculiar purpose and it alone.

Thus—we do not know what Sound *is*, except as it is cognized by us, but we know that it is, and we know that it may be produced by different agents, or in different ways. It may be produced by wind-instruments; by the flute, the cornet, the organ, the organs of bird-song and of human speech; by all manner of string instruments, the harp, the violin, the piano; by the striking, clashing and vibrating of objects together and upon one another as by cymbals, drums, bells; by the knocking, the grating and grinding of one surface upon another; by the rubbing action of many insects giving out their peculiar noises; it comes through the agency of wind as it sighs among the pine branches, or sings along the outstretched wires of the telegraph and telephone; it comes through the agency of water, as it tosses along the bed of the mountain torrent, as it falls

Various Sources of Sound

in cataracts and as the ever-sounding waves roll upon the sandy sea-shore, or dash themselves against the rock-bound coast; it comes through the vibration of solid bodies, as from the tuning-fork, which has been struck and is held on end upon a sounding-board, and as the firmly fixed giant bell in the belfry, long after it has received the blow of the hammer, sends forth the pulsations of its sweet tones; it comes from the slightest movement of the hand upon, or over the external ear; it comes to the delight and wonder of childhood, from the sea-shell, as it seems to reproduce the sound of the far distant sea, as though it had kept it stored up within its own recesses; it comes from perhaps unknown and unexplained activities deep in the interior of our globe, giving the peculiar sound of the earthquake and the loud explosions of volcanoes in eruption; it comes from the firm pressure of the wound-up spring of a watch, and from the steady down-pull of the weights of a clock; it comes from mysterious agents or forces, from gravitation, elasticity, cohesion, repulsion, from heat, galvanism, magnetism, electricity and chemical agents; it comes from nerve force and muscular power, as also from the inexplicable vital processes, as within plants, animals*and men.

All these numerous and varied agents, and activities, from which sound comes, are physical and are involved in the deepest kind of mystery; and it is not strange, but in accord with all this, if sound be produced within the delicate auditory nerve construction by a number of dissimilar agents and activities, the Sound itself being a physical quality, *which being present* is cognized by the indwelling Soul no matter how it is produced. We are familiar with three ways, in which sound is produced within the auditory nerve construction. The ordinary way is that of air vibrations; it is also produced by cer-

Ear made for Sound Only

tain more or less disordered conditions of our organism, giving us ringing or rumbling within the ears; and a third way is by the teeth. This latter is so decided that it has been utilized for the benefit of those who are deaf or hard of hearing. A broad sheet of thin metal, like a sheet of stiff paper, or a fan, is held between the front teeth by one edge and thus held conveys the voice of a distant speaker to the listening Soul and so well that it is intelligently apprehended.

Again, as there are voluntary nerves constructed for the "Will" and for the "Will" alone, and as there is the optic nerve and the retina fitted for our perception of light and color and of these alone, so also we have the auditory nerve construction for sound. If we have wondered at the structure of the Retina, adapting it for vision, we wonder equally at the structure of the inner ear and its nerve connections, fitting them for hearing.

The inner ear with its ear drum, its little bones of most curious fashioning and the marvellous manner in which it is united with the auditory nerve, is such as man never would, or could have devised. And having been thus designed and delicately wrought for the special purpose of bringing the Soul into contact with and perception of sounds, it is not strange that it is useless for anything else. It is the *hearing* organ and is as incompetent for sight etc., as are trumpets, telephones, phonographs and instruments of music.

It would seem superfluous to dwell upon the olfactory and gustatory nerves. It may be said, however, that the same things are true in regard to them, which we have pointed out in regard to the eye and ear. It is well known that perfumes and flavors may be produced by various agents and activities. By the apothecary's art and skill, perfumes and flavors may be compounded from different materials, perhaps both of them from the same

A Material Science

materials, and, possibly, almost all natural perfumes and flavors may be with more or less success, artificially produced.

It is also evident that the nervous structures for smelling and tasting have been designed, and fitted for their special purposes, as truly as have the eye and the ear. So again it is not strange, if they are for these purposes alone and if perfumes and flavors may be brought to the olfactory and gustatory nerves by various agents.

In the *fourth* place, it must again be remembered, that Physiology is a material science. It has to do with that which is physical and its teachings are of a physical character. As an actual fact its tendency is decidedly towards materialism. It must not be permitted to fashion and determine our conceptions of the powers, qualities, activities of the Soul. If it does this, we *are sure to fall into error*. Materialism is the inevitable result.

Physiology teaches that by special nerves an excitation is carried to the Sensorium, the base of the Brain. This being excited produces within itself the *sensations* of pain and pleasure, of color, perfume, flavor, sound, touch, etc. And as the Sensorium produces the sensations or feelings so, upon excitation, the Cerebrum, the upper part of the Brain, produces ideas, thoughts, etc. According to this the activities of the Soul, *its* feelings, sensations, ideas, thoughts, etc., are the activities of the two parts of the brain, a material organism, between which and the Soul there can be no real distinction and no independence of being. The Soul, therefore, so far as it exists, is a material thing and dies with the body; or its activities and experiences are material and must cease with the destruction of the material organ within which they arise and to which they belong. The only knowl-

Our Doctrine Spiritual

edge, however, which we have of the Soul is that of its activities and experiences, but if these be the activities of the brain, we have no knowledge of the Soul and no proof of its being.

If this presentation of the teachings of Physiology be regarded as exaggerated, it must be acknowledged at least that the decided tendency of its teachings is materialistic and that it is impossible to see how their final issue can be other than materialism.

It cannot be said that our own doctrine is itself, in some measure, materialistic also as it teaches that the feelings of physical pleasure and pain are due to the activities of the body, and are not apart from these.

Our doctrine expressly holds the absolute distinction between Spirit and Matter and that these *feelings* are themselves purely spiritual, being activities of the Soul and not of the body. They are due to, because the reflex of certain activities of the material organism and are largely for the sake of its well being, through proper attention given to it by the Soul because of them, which might otherwise neglect it. When the body dies, there is no longer need nor cause for these peculiar feelings and the freed Soul lives on, itself entirely unimpaired. It simply ceases to act in this manner; it is free from physical pleasure and pain.

In contrast to this, Physiology teaches that *all* our activities, our feelings of pleasure and pain, our sensations, our ideas, thoughts, memories, etc., are *themselves* the activities of the brain.

An *Illustration*, imperfect and fit only to aid the apprehension of the thought of the relation, according to our view, of the Soul and body in regard to the feeling of physical pleasure and pain, may be found in Electric Induction. Thus there may be a complicated electric instalment, or apparatus with its own generators, or

Relation of Soul to Body Illustrated

sources of electricity and its own electric phenomena. If one of its conductors have an outside live-wire running along in close proximity, but without any contact of the two, there will, or there may be electric activity induced in the apparatus with electric phenomena due to it. When the live-wire is removed the induced electricity and its phenomena cease and the apparatus remains in its unimpaired integrity. Thus the Soul, having feelings of pleasure and pain the reflex of certain activities of the body, ceases to have these feelings when the body is destroyed, and maintains its own integrity unimpaired.

Another illustration may be had in the perturbations of a comet. The comet has its own orbit, motion, force, etc., but coming under the influence of the planets, near which it may pass, it suffers certain perturbations in its movements. But when freed from the planetary influence, such perturbations cease and the comet once more acts for and of itself. Thus the Soul, while dwelling within the body experiences certain feelings, which are the reflex of the body's activity, but when it leaves the body it is freed from its influence and lives acting for and of itself.

Nothing can be more evident than that our doctrine has no trace of materialism; while the teachings of Physiology are decidedly of a materialistic character and must necessarily be so as long as they maintain their present doctrine of sensation.

Reference might also be made to what the Physiologist calls "*strictly subjective sensations.*" It is said that ideas and thoughts arising from the Cerebrum may give excitations to the Sensorium, and that the Sensorium will then produce sensations such as it does when otherwise excited. Hence arise apparitions, visions, illusions, etc.

Here again, however, the asserted facts, or operations are altogether physical and entirely outside of Conscious-

ness. They cannot teach us concerning the activities of the Soul. The true explanation of the well known phenomena of phantasies, etc., is found in the wonderful retentiveness of Memory and the marvellous power of the Imagination, weaving mental material into endless varieties of phantasmagoria and imparting to its creations the vividness of actual external realities, while the Soul is so absorbed by the very intensity of its activity in so doing, or so troubled by reason of some organic disorder, or disease, that for the moment it fails to recognize the true character of its creations and to place them where they truly belong, among mental phenomena.

This explanation is founded upon and grows out of that which we *know* from Consciousness as to the power of Memory and Imagination, and as to the way in which the Soul may be at times, as it were, entranced with its own operations, or overwhelmed with suffering.

Thus we have an explanation thoroughly spiritual, with the full recognition of the Soul; and on the other hand, the teachings of Physiology of a materialistic character, with the being of the Soul denied, or in doubt.

But whatever be the character and tendency of the teachings of *Physiology* and whether we have presented them correctly, or not, it is certainly a physical Science and must be kept within its own sphere. For our knowledge of the being, powers, activities of the Soul we must rely implicitly upon the infallible testimony of Consciousness. Only thus can we rise superior to the errors, the difficulties, the perplexities and, perhaps unanswerable, questions which come from the material sciences. Consciousness knows nothing of the distinction between the upper and lower parts of the brain; it knows nothing of nerves and nerve construction, men do not so much as know that they have them. Its sure testimony is that

The True Testimony**Firm Ground**

when, for example, we see and hear and touch, we perceive neither nerves, nor wonderful delicate organs of perception, but cognize the realities themselves of the external world with which, by these organs the Soul is brought into contact, even as the scientist sees neither telescope, nor microscope, but looks through them upon the stars of heaven and upon the wonders of the world invisible to ordinary sight. Relying upon this testimony we stand upon firm ground, secure from all the difficulties and perplexities of physiology and all the assaults of materialism.

The exposition, which we have given of Sensation, is perfectly true to the essential distinction between Spirit and Matter; it avoids every trace of confusion of the qualities and activities of these with one another and brings distinctly forward the fact that our sensations are purely spiritual, being feelings of pleasure and pain within the Soul; and that color, sound, perfume, flavor etc. are qualities of the external material world.

All this is essential for the true knowledge of Sensation and for the proper presentation and understanding of External Perception.

We have conceived of the Soul, as being at the outset fully endowed with all its powers; as in itself a perfect blank and as vitally united to an immature and as yet unborn body. We have thought of it, as having for its first experience sensation, some feeling of pleasure or pain, of comfort, or discomfort. This may be very slight, or obscure, but yet real and the beginning of innumerable and decided feelings, which are to follow, as its experience grows and ripens with the growing and maturing body.

This experience, however, is not to be regarded as certainly and actually the very first, for we must suppose that simultaneously with it, possibly a little earlier, or

Perception and Feeling Coincident

later there is some degree of perception. In thought we can hardly dissociate them from one another as the Soul must be thought of as having some perception of itself in feeling. Practically we may regard the two experiences as arising coincidently, as with the feeling of physical pleasure and pain there would be, we may well suppose, some perception of the body through pressure or touch.

Perception is the power of cognizing the realities of the inner world of Self and of the outer world of Matter. We have, therefore, that which is called Internal and External Perception. To the latter of these we now direct our attention.

Intuitive Perception

CHAPTER V

External Perception

SECTION I REALITIES COGNIZED

ALL our knowledge comes from Perception. The Soul has no innate, or native ideas, principles, axioms, fundamental Truths. It has nothing of the kind whatever, not even in a latent, obscure, undeveloped, unperceived condition awaiting time, opportunity, circumstances, influences to mature them and to awaken the recognition of them in Consciousness. The simple fact, and one which must necessarily be definitely apprehended and acknowledged for true science, is that the Soul at the beginning is endowed only with its powers, faculties, or attributes and the laws which govern their operation, including in this what may be called, in a general way, tendency, disposition, character.

In this there is a striking correspondence between the Soul and the material Cosmos. The latter, when it first came into being as a Nebulous mass of extreme tenuity, was simply the material substance with endowment of its forces and the laws governing their action and reaction upon one another, together with such disposition, tendency, direction, order, relation, off-set of these forces, or condition of the Nebulous mass itself, or some kind of impress which caused the Nebula, under the operation of its forces acting according to their laws, to develop into the physical Cosmos which now is, and not into some other possible one. So each individual Soul, as it

comes into being, is simply a spirit with endowment of its powers or attributes and the laws governing their activity, together with such individual relation, or ordering and kind, or character of these powers and such particular make up, or constitution of the Soul itself that will cause it to develop in its own particular way and according to the material furnished it and the influences brought to bear upon it.

It may be regarded as generally acknowledged, that the Soul, being at the beginning such as we have represented it, needs something to evoke its powers and some material for them to act upon. This is furnished by its perception of the realities of the inner and external worlds. *This material is all that we have.* We create and can create nothing. All that we can possibly do is to observe and lay hold of these things and then weave them into the endless variety of ideas, thoughts, conceptions, imaginings, which have arisen within the minds of men, and *discover* and formulate laws, principles, axioms, etc., inherent in these things and in their relation to one another and which reveal themselves to our scrutiny.

The realities which the Soul perceives, being those of the internal and external worlds, we have reason to suppose, that at first it occupies itself chiefly with those belonging to the latter and that it is these, rather than the former, which primarily evoke the activities of the Soul and stimulate their development. Hence it is that External Perception presents itself first, in natural order, for our consideration.

This has been designated by various terms. It has been called "Intuition," "Intuitive Perception," "Immediate Knowledge," "Knowledge of external things themselves," "The Cognition of external realities." "Cognizing of external realities by material or bodily organs of Perception." It has also been designated, but wrong-

Various Names

Definition

fully as we have carefully pointed out, as "Sense Perception," or "Perception of the outer world through the Senses, or by organs of Sense, by special Senses, or by Sensations."

In a general way, we may say that External Perception is the power of *Cognizing the Realities of the External World*, with which the Soul is brought into contact, or rather which are directly presented to the Soul by our bodily organs of Perception, even as telescopic and microscopic vision is the power of seeing the things which are presented by the telescope and microscope and which are thus brought within the sphere or reach of vision. As these instruments present objects to the eye and bring them within its power of vision, so our bodily organs present external realities to the Soul and bring them within its power of cognition.

In such Perception the all important element is the power, with which the Soul is endowed, of cognizing external things. Here we have a most profound mystery; the possibility of such power surpasses our highest conception. But the same thing is true of all power, whether spiritual, or material. We cannot understand what physical force is. We exert our own muscular energy, but cannot tell how, or why; we think of the force of cohesion, such as gives tensile strength to a solid bar of steel, and resistance to adamantite rocks, a force of surprising power when the atoms of these things are in closest kind of contact, but which vanishes the instant they are separated by less than a hair's breadth; and we think of the force of gravitation, which exerts its power over worlds hundreds of millions of miles distant, holding them in their orbits, and we are overwhelmed with wonder. What are these invisible forces, so alike in power yet so dissimilar in operation? We are no less bewildered when we think of forces of the opposite char-

acter, which are as mighty to repel, as the others are to attract and hold; the explosion from superheated steam, the explosion and rending from dynamite and all high explosives. What shall we say to the irresistible force of expansion and contraction due to heat and the withdrawal of heat, or of the subtile power of electricity and magnetism? How is it that these subtile things have such power over the atoms of matter as to make them shine with brightest light and exert mechanical energy? Our wonder rises higher yet, as we think of the silent influences flowing from the sun dispelling the desolations of winter and filling Nature with life and verdure. What is this life-giving power?

Thus it is with the material forces, and if the mystery be greater, which hovers over and rests upon those which are spiritual, it is only because these are powers of a higher order. The mystery is equally real in regard to them all. We cannot penetrate into it. All we can do, as we wonder, is to say—“*These powers are.*” “*The Soul has power to take knowledge of the material world.*”

This it does in virtue of its own power directly and not through some intermediary, which makes an impression upon the Soul, an impression of which the Soul takes cognizance and through which it learns something of that which lies beyond itself.

However deep the mystery, this is the fact which we must distinctly apprehend; the Soul has power to cognize the things of the material world directly. It looks upon them when present, and knows them. This is true “Intuition,” a looking upon and seeing and knowing that upon which we look.

Herein is the very essence of true External Perception.

To this we must be perfectly and steadfastly true and in all our thought and exposition of it we must not allow the least encroachment upon nor modification of

The Soul's Marvellous Power

it. It must be made to stand out clearly, boldly prominent in its untouched, unimpaired integrity and in the fulness of its deep-seated mystery.

This is the Soul's marvellous Power—it knows the realities of the world—*it cognizes the things which are.*

That the Soul has such power admits of no doubt. It is a well known fact, that it is endowed with power in regard to material things.

It is in vital union with the bodily organism, the life of which depends upon its indwelling presence. United with the body at its very origin, it is its guiding, controlling, formative principle, building it up according to the Soul's own fashioning and making it distinctly a human body, with a great impassable gulf of separation between it and the body of the animal. Such is the actual power of the Soul in the physical organism, that this is quickened, or depressed according to the varying disposition of the Soul. A contented, bright, cheerful frame of mind imparts physical health, strength, healing; while gloominess, despondency and in a most marked manner anxiety and worryment induce bodily depression, sickness, wasting away and even death. Still further, there is nothing concerning which we are more assured than that the body is swayed and determined by emotional states and activities of the Soul. All the mobile features of the face, the movements and attitudes of the body are under such control of the spirit within that they are the outward and visible expression of its wishes, hopes and fears, its love and hatred, its rising and falling passions. All, thus far mentioned, are due to the direct power of the Soul over that which is material.

Miraculous Power

But the most impressive and wonderful example of this is found in the Will. We are filled with awe, as we

Miraculous Power**Will=Power**

think of the Divine Will. God is clothed with authority and power. He "wills" and all things obey. This miraculous attribute He has, in some measure, imparted unto men. The possession of this forms part of our likeness to God. He has endowed us with "Will-Power" over material things. We likewise "will" and it is done. This is utterly inexplicable, but the fact is a familiar one in our experience. Every day, almost every moment we are exerting this power over material things. Every voluntary motion on our part is an example and illustration of it. This is as truly miraculous, as though by an act of the Will we moved mountains and trees and cast them into the sea, or changed the courses of the stars. This is miraculous in the sense, that by direct Will-Power we moved these things. But this is precisely that which we do in our voluntary movements. By direct "Will-Power" we determine our nervous energy. We "will" and this material force obeys and produces all our muscular activity according to our pleasure. This miraculous power over material things is actually our own, and it reveals to us the wonderful character of the Soul in relation to the external world.

This miraculous "Will-Power" is of especial advantage to us in setting forth the nature of the power of the Soul to cognize external realities. Both of these powers are equally miraculous in the sense of the word stated, that they are the direct act of the Soul in reference to that which is material. As there may be one such miraculous attribute of the Soul, there is no reason why there should not be another. The fact that there is one, that of the Will, which is so assuredly known and so manifestly direct, or miraculous, enables us to accept without hesitation every indication that there is another of the same character, that of the direct

Nature of External Cognition

cognition of the external world. This is that which we would naturally suppose; the two attributes would simply be in accord with one another and with what seems to be revealed by the Will-Power as to the nature of the relation of the Soul to that which is material, that it is essentially miraculous, or direct; a relation, moreover, confirmed by the other influences of the Soul over the body, which we have also named above, all of which are of the same direct, or miraculous character.

The indication given by the Will as to the nature of the cognition of the external world is, however, still more impressive.

We cannot help regarding the Will-Power as superior to and more wonderful than the Cognitive. Properly considered the Will seems strikingly miraculous. What can be more so? It is simply and literally true, that we have governing power over material things by the mere act of the Will. *We will and it is done.* Every voluntary movement is thus determined. Such power as this over material things, seems altogether superior to that of "simply taking knowledge of them." By the one power we govern, guide, control, determine. We exercise authority, rule, dominion so that these things do our bidding; they come and go, act and move just as we think, wish and order. They are obedient to a word from the invisible Soul. This is surprisingly like unto the very power of God and the likeness is not only apparent, it is real; the power which God has omnipotently, we have according to our finite measure.

There is no exaggeration here, no mere use of figurative language, but the plain statement of what we assuredly know.

With such a miraculous power as this before us, we have on the other hand in contrast to it, that of "knowing things." As we compare the two, the latter seems

A Miraculous Being**Miracle Defined**

to fall into complete insignificance. "To take knowledge of things" must be regarded as altogether inferior to "direct and govern them." If this latter, strikingly miraculous power, be an attribute of the Soul, as it really is, the inferior miraculous power may assuredly be an attribute of it likewise. And as such is the nature of the Soul, that it rules at pleasure external things directly by a mere act of its own, that very same nature must enable it, being an intelligent agent, to take direct cognizance of them. Or in other words, the fact that the Soul has this miraculous power over material things shows that it is in itself in reference to them a miraculous being. All its activities in regard to them must be of this supreme character.

It may seem strange to employ the word "miraculous" as we have done. But we have made such use of it because it precisely expresses the idea which we wish to convey, that of direct action by an unseen spiritual power. The very definition, which may be given of the word, shows that it is thus expressive and appropriate, if taken in its own simple meaning and apart from a supernatural, technical, religious significance. It may be thus defined, a miraculous agent, in the material world, is one that produces its effects by an unseen spiritual power directly, that is without any instrumentality; or a miraculous act is that which is due directly to an unseen spiritual power.

These definitions are strictly correct in regard to every thing that is generally known as miraculous. They properly express the miracles of Our Lord. They were done by the virtue which went forth from Him. He wrought directly by His unseen, spiritual power. These definitions are equally true in regard to the human Soul. In its volitions it works directly by its unseen spiritual power; in its cognition of external realities it

Striking Presentation

acts directly by its own unseen spiritual power. Our use of the word is precisely correct and perfectly appropriate.

Moreover, we employ it to give a *striking presentation* of the wonderful nature of the Soul and of the true character of its essential relation to that which is material and of its mode of action in regard to it; and to remove in the most emphatic way possible the thought of perception through the senses, and to hold up, in a manner not to be misunderstood nor forgotten, the fact that volition and external cognition are the direct acts of the willing and intelligent Soul, being truly *miraculous*. Manifestly no other word would be so strikingly impressive, and effective.

It would be unfair to impute to it, as we have explained and used it, anything of a supernatural, technical, or religious character and to charge us with being unscientific.

There is a gulf of separation between the spiritual and the material; let the communication between the two be designated by the word *miraculous*, as we have defined and used it, and a clear, never to be forgotten conception of its essential character, as we believe it to be, will be had; the conception of it as the direct act of the invisible Soul. In virtue of its own inherent power it cognizes external realities and rules them according to its own pleasure. It is in this *miraculous* way, or by this *miracle* that the Soul brings itself into and holds communication with that which is material, overstepping the gulf of separation between them. The relation of the Soul to matter is miraculous.

With the possibility of this miraculous power of external cognition, thus established and its actual reality well founded on the grounds which we have presented, we now look at the *Positive Proof* of such reality. It is

St John Quoted as to Realities

found in the infallible testimony of Consciousness. We have noticed this repeatedly in speaking of Sensation; but it must be presented here again very distinctly, as everything depends upon it. In presenting this testimony we must be extremely careful, that the statement of it be correctly made and its true interpretation given.

Quotation from St. John

There is a presentation of this testimony in most beautiful and impressive language at the beginning of the First Epistle of St. John. As a preliminary we quote it because of its singular beauty and clearness. "That which was from the beginning, which we have heard, which we have seen with our eyes, which we have looked upon, and our hands have handled, of the Word of Life. For the Life was manifested, and we have seen it, and bear witness, and show unto you . . . that which we have seen and heard declare we unto you."

In this there is positive statement of an external reality. The reality was of the most thorough character, it was itself an Eternal reality. This "real being" had been manifested; it was incorporated in a material organism, having an independent, abiding existence, that could be seen, heard, and handled. It was intelligently apprehended by sight, hearing and touch, and that, which was declared to be real and true and to which witness was given that it was real and true, was the thing known by being itself heard, seen, *looked upon* and handled. Here is the clear statement that the very thing which we see, look upon, hear and handle is real and true.

"That which we have heard, which we have seen with our eyes, which we *have looked upon*, and our hands have handled, declare we unto you," "bear witness," "show unto you."

Differs from Philosophers

Nothing can be more evident than that the writer of these words believed and meant to affirm the objective *reality* of what he saw, looked upon, heard and handled, and that it was in itself what he thus knew it to be. He cognized directly the realities themselves which were presented to him by the organs of perception, and was sure that his knowledge was true. He expected men to receive with confidence what he declared to them, as that which he himself had heard, seen, looked upon and had handled with his own hands. To him such knowledge was indubitable, as it was also to Thomas who, when the risen Lord showed him his hands, feet and side, threw away every misgiving, saying in assured faith "My Lord and my God."

It is worthy of special note that the presentation given in the passage quoted, is radically different from that of the philosophers who affirm that we perceive only the Primary Qualities and that all else is "Sensation." In the passage before us, there is a clear and bold belief and declaration that the conception of the external reality, given by sight, hearing and touch is equally real and true in all its parts, *it is a unit*, it stands out in its unbroken and undivided integrity as an objective reality. It seems, indeed, almost as though the writer designed by his choice of words to prevent any other supposition. He says "which our hands have handled," as though that, towards which he stretched out his hands and touched, were an independent object in all points such as he apprehended it to be; and by explaining "seeing with our eyes" by the expression "which we have looked upon," he yet again puts a gulf of separation between himself and the object seen, as though he confidently believed that the *total vision*, he beheld, were a real object *upon which* he looked as from a distance, a belief which is the common assurance of all men, as we shall

Realities Seen, Handled. Heard

notice again. And still further, he speaks of *sound* as itself truly objective, for he places it, equally with that which he apprehends by sight, and touch, as the reality which he declared and showed, and as the sure proof of the truth to which he bore witness; "that which we have seen, handled and *heard* declare we unto you." Evidently to him light, color, sound and that which is apprehended by touch, are equally objective realities.

The passage, which we have quoted for its beauty and clearness, is the true presentation of the testimony of Consciousness as to External Perception. It is expressed in popular language and this is its peculiar worth. Being popular in language, it expresses exactly public opinion, popular sentiment, the conception of man as man, the assurance of our race, the confident belief of all children, of all adults, of all educated and cultured ones, except in so far as these have been led astray by false theories of their own; and even these irresistibly return to the common intuitions in their daily life, casting their theories aside.

This general assurance is one of the strongest proofs, which we can have, of the truth of any particular interpretation of Consciousness.

Such being popular sentiment, the careful statement and examination of the Testimony of Consciousness as to External Perception will afford a theory not contrary to, but in accord with this confirmed belief of mankind.

Testimony of Consciousness

We are conscious that we are intelligent beings, that we possess knowledge, that we may and do add to our knowledge. We are conscious that we take knowledge of things which are, and which in some way are presented to us that we may know them. This is expressed also by the word "to cognize;" to cognize is to

1 **Manifold Cognitions**2 **Two Groups**

take knowledge of. Thus we are distinctly conscious that we have the power of cognizing.

1. In the exercise of this attribute, we are conscious that we take knowledge of a vast array of things of the most varied character, which are continually coming and going, presenting themselves, vanishing away and reappearing, as though we had before us an endless procession, or an ever-moving panorama of complex relations pressing and crowding upon one another. Thus we cognize our own being, we know that we are. We cognize multitudinous thoughts, imaginings, reasonings, emotions, pleasures, pains, joys and sorrows, hopes, fears, desires, aspirations, power, effort, determinations, volitions, our bodily frame with its members, and the boundless wonders and beauties of the realm of Nature, with every hue, tone and shade of color, and voices and songs, music, whisperings and thunders, perfumes and flavors, expansion, force, vapors, liquids and figured moving solid bodies. Such is something of the vast array of things of which we take knowledge. As to this the testimony of Consciousness is absolutely unmistakable.

2. With all this material spread out before us, we are definitely conscious as we cognize these things, that, complex and interwoven as they are with one another, we take knowledge of their differences and arrange and classify them. We are conscious that there is a radical, or fundamental distinction running between them, separating them into two groups. The number of these groups are very dissimilar among themselves, but those of the respective groups are all bound together by a common characteristic. We place such as thoughts, emotions, volitions in one class, and those having extension, figure, solidity, color, sound, perfume, etc., into another. We are distinctly conscious that the radical

distinction between these classes is of a twofold character; thus—

We are distinctly conscious, that every thing which may be included within thought, emotion, volition belongs to ourselves; they are qualities, attributes, activities of our own being; they belong to the realm of "Self." We are no less distinctly conscious that the other things, such as extension, figure, solidity, color, sound, etc., are not our own; they are not qualities, attributes, activities of our own being; they belong to the realm of "not Self." The second characteristic, is that the things of the one class are incompatible with those of the other. They are parted from one another by an impassable gulf of separation. We are definitely and positively conscious that they are contraries; what the one class is the other is not. What is affirmed of the one is denied of the other. The one has thought, emotion, volition, the other has no thought, no emotion, no volition; the one has extension, figure, solidity, color, sound, etc., the other has none of these. Contradicting one another, the things of the realm of "Self" cannot be interchanged with those of the realm of "not Self," and there can be no combination, nor coalescing of these discordant qualities, attributes, activities, no union of them forming an intermediate.

3. We are still further conscious, that all these things of which we take cognizance have real being and must be attributes, qualities, activities of two substances, those of the one class belonging to one substance and those of the other to the other one of the two, and that these substances must be contrary to one another. The one has been named Spirit and the other Matter. Our Consciousness, clear and bold, is that of the essential distinction between the Spiritual and the Material. The one is the realm of "Self,"—the other is the realm of "not-Self."

4 All Cognized in the Same Way

The attributes of the former of these two are the attributes of Spirit, the attributes of the other are the attributes of Matter. Substituting the designations Spirit and Matter for those of "Self" and "not Self," the Consciousness, mentioned above as to the contrary character of the two classes of attributes, is our Consciousness of the attributes of these two substances. The one cannot have the attributes of the other. Matter cannot have thought, emotion, volition. Spirit cannot be extended, liquid, solid, figured, it cannot be red, yellow, blue nor any combination of these colors, it cannot be orange, green, purple; it cannot be sweetly perfumed, nor can it be bitter and acid; it cannot be a hot and cold spirit, nor itself resonant with sound, a low and loud sounding spirit. The striking absurdity of such suggestions shows how unmistakably, positively Consciousness affirms the material character of these things.

4. Again, we are conscious that in taking knowledge of the things of "Self" and "not Self," we cognize them all in the same way. When certain thoughts and imaginations are before us, we are conscious of them; they are present and we simply know, that we know them. Thus it is in regard to all the innumerable things of the realm of "Self." In like manner when we cognize the things of "not Self," such as extension, figure, solidity, color, sound we are conscious of them, they are present and we simply know that we know them. It is as though there were one vision of the Soul wherewith we look equally upon the two realms, now upon the things of one, now upon the things of the other, according as we direct our vision to the one, or the other. Our definite Consciousness is that there is no difference in our apprehension of all these things; the spiritual and the material are equally apprehended by direct cognition. Consciousness also testifies that in taking knowledge of

5 Are What we know them to be

the things of "not Self" we know of no difference in our apprehension of them. However dissimilar they may be, they are all cognized alike. Extension, figure, solidity, color, sound, perfume, flavor are present, we are equally conscious of them all; we simply know that we know them.

5. Still further, we are conscious that the things of "Self" and "not Self," which we cognize, are in themselves what we know them to be. We are conscious that they are realities. We know that we ourselves have real being. And we know equally well that all the varied things, presented to us and of which we take knowledge, have real being likewise. The ground of this knowledge is the same in both cases. If there are certain thoughts, imaginations, etc., before me, I am perfectly conscious that they *are*. Their *actual being* is that of which I am conscious; and if there are certain things of "not Self" before me, such as an extended, figured, solid, colored body, I am perfectly conscious that it *is*. Its *actual being* is that of which I am conscious. And as we are thus conscious that the things of which we take knowledge are *realities*, we are conscious that it is *the very things themselves*, which we know. In being conscious of mine own real being, I am conscious of *myself*. In being conscious of the real being of certain thoughts and imaginings, it is of these thoughts and imaginings *themselves* that I am conscious. In being conscious of the real being of a particular extended, figured, solid, colored body, it is of *this thing itself* that I am conscious.

Being thus conscious, as we assuredly know ourselves to be, of *these things themselves* in their own real being, we know that they are what we know them to be. Thus we know that we are what we know ourselves to be; we know that our thoughts and imaginings, etc., are what we know them to be; and we know that the blue sky,

6 Infallibility

the sun, moon and stars, the moving clouds of ever-changing shape and color, from dazzling white to darkest shades of thunder storms, the forked flashes of vivid lightning, the rolling reverberating thunder, the diversified mountain ranges, and towering snow-clad mountain peaks, the valleys and plains covered with green forests and herbage, golden harvests and adorned with flowers of every hue and fragrance and white with the covering of snow, the lakes, rivers, sounding water-falls, the foaming, loud-sounding, rising and falling waves and breakers of the far-spreading ocean, the variegated, gorgeous plumage and the songs of birds, the unnumbered voices of Nature, the whole marvellous Cosmos, all are what we know them to be; our knowledge, so far as it goes, is real and true, we are conscious of these *realities*. This is a consciousness which we all have and from which no one ever has and no one can set himself free.

6. We are also conscious of the Infallibility of the cognizance, or knowledge, which we take of the things of "Self" and "not-Self." As a matter of fact, we have perfect confidence in such knowledge. This is indeed but the statement of that which we have just mentioned above. As we are conscious of the reality of our own being and of the real being of the things of "Self" and "not-Self," that is of these things *themselves as they actually are*, there is no room nor possibility for error in such knowledge. Error would involve a manifest contradiction; we would be conscious of that *which is* and conscious of it, *because* it is, and yet, that which is would not be. Conscious of such glaring self-evident contradiction, we rest assured of the infallible character of our cognizing the things of "Self" and "not-Self." This finds expression in the familiar proverb "to see is to believe;" and this is the sure foundation of all the modern inductive material sciences. They are built upon

No Mention of "Senses"

observed facts and derive all their certainty from the reliability of observation.

The simple reason, why the Testimony of Consciousness is Infallible, is because by Consciousness we take direct knowledge of the things which *are* and which are present to us. Such is this known Infallibility, that we not only have perfect confidence in it, but also cannot rid ourselves of the assurance which it gives us.

The Statement, which we have given of the Testimony of Consciousness, must commend itself to all as manifestly correct. Each successive affirmation is evidently true; its truth may be confirmed by each one for himself, through the examination of his own consciousness.

1. *The Criticism cannot be made* that the statement given is incomplete because there is no mention made of the so-called "Senses." The reason is because there is no place, no room for them. They do not come within the sphere or range of our Consciousness as to the cognition of external realities. The statements made exclude such sensations, positively deny them. The testimony is that the things, of which we take knowledge, are divided into two classes, that of "Self" and that of "not-Self," and into these two classes alone; that color, sound, perfume, flavor, etc., belong to the things of "not-Self." This testimony is as distinct and positive as that extension, figure, solidity, belong to this same class. There is no distinction between all these; they are all equally the qualities of "not-Self," none of these can be transferred or attributed to "Self;" this can no more be colored, resonant, etc., than it can be extended, figured, liquid, solid. Moreover, there is no mention made of the so-called "Senses," because there are none. The things which are so called are Perceptions. Consciousness testifies, that we do not feel color, sound, perfume, etc.; we *cognize*, take knowledge of them, we *perceive* them.

No Mention of Organs of Perception

2. Again, *it cannot be objected*, that there is no mention made of our bodily organs of Perception. This is because the Consciousness presented is strictly that of the cognition itself of external realities. In taking knowledge of these, we are not conscious of the organs of perception, though we indeed know that we have and use them. When we see, it is not the wonderfully constructed eye which we see, but the vision upon which we look; when we hear, it is not the ear, but the sound which we hear; when we handle an object, it is not our finger-tips which we cognize, but the solidity, the shape, size, character of the object handled; when the blind pass their finger-tips over the embossed paper, prepared for them, that of which they take knowledge are the letters and the words and thereby the meaning which they convey.

The illustration, which we have already used more than once, is that taken from scientific instruments. The scientist sees not the telescope and microscope, though he knows that he has and uses them, but the things which these instruments bring within his range of vision and present to him. It is not the telephone, which men far separated hear, but the words spoken from afar which it brings to them.

The Testimony of Consciousness, which we have given, being that of Cognition itself, the consideration of the bodily organs of Perception will be presented in due order.

In the exposition given of *True Sensation*, we have presented at some length the proofs that color, sound etc. are not sensations. In so doing we pointed out, that if they were such, "Idealism" would be inevitable.

Here we make this the more emphatic by showing, that if the theory of "sense-perception" be true, the *primary qualities* no less than the secondary must be

Sense Perception and Idealism

subjective, and we would have no knowledge of the external world, except, *perhaps*, as an occult cause; the conception which we form of it would have no objective reality.

a. According to the theory of "Sense-Perception," our communication with the external world is by our senses, or sensations. Were we deprived of the five, or six which we are supposed to have, we would be absolutely cut off from the world and would be in total ignorance of its existence. Were we blind and deaf and without smell, taste and touch, or feeling and the muscular sense, every avenue of knowledge would be wanting. Sensation, therefore, is everything. All that we actually perceive is sensation. The so-called primary qualities depend upon it. If we perceive extension, shape, size by sight, it is only as we perceive color as extended, figured and of a certain size. Take the color away and these all immediately depart. The extension, shape, size depend upon the color, they are the qualities of it and have no more objective reality than color itself has.

b. Again, if we perceive extension, shape, size, weight, solidity by touch, it is only as we perceive the peculiar sensations having these characteristics. Take these peculiar sensations away and every thing is gone. That which we perceive is the *sensation* of extension, size, weight, solidity; these all depend upon the sensations and of them they are the qualities, and can have no more objective reality than the sensations themselves. If by the muscular sense we perceive force, or resistance, it is only as we perceive the peculiar sensation having this characteristic. Take the sensation away and the force, or resistance which depends upon it and is its quality, departs also. The two, the sensation and the force its quality, are equally subjective.

Primary Qualities Subjective

c. It cannot be claimed, as has been done, that two, or more sensations are perceived as apart from one another and that thus we have the perception of extension, for here again everything depends upon the sensations, and there can be no objective reality which the sensations themselves have not. Moreover, the very supposition is itself an impossibility; for sensations cannot be apart from one another, except as they are localized as *arising* from, or *caused* by different parts of an already perceived and known extended body; feelings, "sensations," are affections of the one indivisible Soul, and have and can have no apartness among themselves.

d. Again, it cannot be claimed that, as an actual fact, the primary qualities have an objective reality and that, when in sense perception we are conscious of the sensations having these qualities, such an extension etc., we cognize the fact that there is a distinction between *these* qualities of the sensations and the others which they have; that the former are objective and the latter subjective. This is impossible because qualities cannot be both objective and subjective; if they belong to "Self," they cannot belong to "not-Self."

We have just pointed out, that extension, etc., are qualities of color and of that which is apprehended by touch. If these be sensations as "sense-perception" requires, these are themselves subjective also and can have no objective reality. Still further, if, as according to "sense-perception," that which the "senses" present to us be sensations, there can be no presentation to us by them of that which is objective for us to take knowledge of: that which is itself subjective can present only that which is subjective.

e. Yet again, it cannot be claimed that in "sense-perception" we have both perception and sensation, appre-

According to Sense Perception

hending by the former the primary qualities and by the latter the secondary. This would no longer be *sense-perception*. It would not be perception of the sensations, nor by, nor through them, nor of that which is presented by them; they present only themselves. The Perception would be independent of sensation, it would be beyond and above it. We would be conscious of the sensation, which is purely subjective, and *aside from this*, we would directly cognize that which has objective reality, but for the presentation of which to us no provision is made. *Thus perception is obtained by the destruction of the theory itself.*

f. Moreover, these two independent activities, *conjoined* to form the so-called "sense-perception," are contradicted by the testimony of Consciousness, which affirms that the so-called Primary Qualities, extension, etc., are essential qualities of color and of that which is apprehended by touch; and that both of these things are external realities; as are also sound, perfume, flavor, force. Instead, therefore, of two conjoined activities forming "Sense-Perception," there is but one, that of Perception itself in its own simplicity.

The above considerations show, conclusively, that by *Sense Perception* we are as ignorant of the so-called Primary as we are of the Secondary Qualities, and that such perception can give us no conception of the external world as it in reality is. It is certain, that on the supposition of "sense perception" the world is not such as all men suppose it to be. Pure Idealism is established.

From all that has thus been said it is evident why, in the statement given of the Testimony of Consciousness as to External Perception there is, and there can be no mention made of sensations; to do so would be the introduction of that which is altogether foreign to it.

Scientific View in Agreement

It is to be remembered that true sensation, the reflex feeling within the Soul of pleasure and pain, is present, but this has nothing to do with Perception itself.

The *Testimony of Consciousness*, which we have given, affords the *True Theory of External Perception*, and in a plain, unmistakable way. There is no need for painful research and elaboration; the mere statement of the Testimony is itself the presentation of what External Perception is.

As we have stated it, Consciousness testifies that we as intelligent beings are endowed with the power of directly cognizing equally and in the same way the things of "Self" and of "not-Self," that is of Spirit and of Matter; that in so doing we cognize *all* the things of "not-Self" as having "real objective being" equally. It is these real things themselves that we take knowledge of, and we know that they are what we know them to be; as far as we directly cognize, ours is an infallible knowledge of the extended, figured, sounding, colored, world—with its perfumes and flavors and the activities of its manifested forces.

Our Conception of it in all these respects is real and true.

Such is the Testimony of Consciousness as we understand it, and our interpretation is confirmed by the universal judgment of mankind. Nothing can be more assured than that which rests upon the self-evidently correct statement of Consciousness and the established and unvarying assurance of men.

Here we have a *Scientific View* which is not contrary to, but in perfect agreement with the popular. The two are one; the same words are equally applicable to them both. "That which we have heard, which we have seen with our eyes, which we have looked upon and our hands have handled we know to be real and true."

This view receives further unfolding and confirmation from the consideration of the Organs of Perception. The proper presentation of these will give a better understanding of it, will show it to be free from difficulties and inconsistencies and that it affords the solution of problems otherwise inexplicable. The consideration of these Organs here naturally arises.

SECTION II THE ORGANS OF PERCEPTION

In speaking as we have done of Sensation and Perception, much has already been said revealing the true nature of these organs. They are the material instruments, or means, each constructed for its own purpose, by which objective realities are presented to the Soul and which the Soul uses to reach them, as these organs are under its voluntary control. We use them or not, and direct them to these objects or those, and with greater or less intensity of scrutiny according to our pleasure. They do not confer power upon the Soul, no more than do scientific instruments upon those who use them; in both cases there is simply the employment of means by already existing agents.

Although the Soul is endowed with the power of directly cognizing external things, it is evident that this is not unlimited.

By the instruments which they have devised, men have greatly augmented their bodily organs of perception; the increase, however, is entirely within the instruments, by means of which the organs are used to greater advantage. Thus by the various optical instruments the range of vision has been enlarged to a most remarkable degree; by them men see that to which they would otherwise be totally blind; by instruments such as the trumpet, the speaking tube, the transmitter and receiver of the telephone, the phonograph, the range of voice and hearing

Instruments Devised by Men

has been enlarged, so that we hear that to which we would otherwise be entirely deaf; the range of Touch has been augmented; the blind, and others likewise, by a staff, or cane feel the ground before they step upon it and objects before they come to them; by long lines and the far-reaching lash of the whip the driver *feels* the mouths of the horses of his *four in hand*, *touches* their bodies and guides and controls them; by pruning shears and bags on end of an extended handle men cut the top-most boughs of trees and gather fruit far beyond their reach; by long cables and chains men extend their arms and hands to deepest depths of mines and draw up material from them; by the "sounding-line" men on shipboard touch the ocean-bottom thousands of fathoms deep, feel its character and contour, map out its geography and bring up specimens for examination; by the "life-line" men of the life-saving stations reach and bring safe to land the crew and passengers of the far off stranded ship; by levers, ropes, and pulleys, windlass, screws, inclined-planes, rollers surprising results are accomplished far beyond our muscular strength. Archimedes truly claimed that, with proper lever and fulcrum, he could lift the world; in these days, scientific observation enabling them, scientists place their hands beneath suns and planets and feel and tell their weight; by sling, bow and arrows men reach with destructive blows far off men and wild game, and by the modern rifle bring them down at a mile range distance. That which is thus done for our bodily organs by invented instruments the bodily organs themselves do for the cognizing attribute of the Soul; they enable the Soul to use this to an advantage, which would without them be impossible, because of the limited character of this attribute. This limitation, moreover, is made strikingly apparent by the increase of its range, given by the increased range of the *bodily*

Organs bring Realities to the Soul

organs, due to invented instruments, as just described. The Soul needs these bodily organs because of its own limited power of perception.

Still further, although the Soul has the power of directly cognizing external realities, it is not omnipresent, and hence can take knowledge, not of all things, but only of that which is within its limited presence, or which is brought and presented to it, confined within its own sphere. The essential character of direct cognition is, that it takes knowledge only of that which is immediately present. Hence, again, it is evident that the bodily organs are necessary. They are needed to bring and present objective realities to the Soul, and the Soul uses them for this purpose, in order that it, unable to go beyond its own sphere, may directly cognize that which would otherwise be beyond its reach, just as the astronomer, and microscopist need and use their instruments to observe that which is beyond their reach.

Among these bodily organs, those which furnish our locomotive, or automobile power are of most remarkable advantage; by them we direct our eyes; change their focus; turn our heads; we reach forth our hands; dilate our nostrils with inhalation; and move our whole person towards things which we wish to know, thus bringing them to the other organs, to be by them immediately presented to the indwelling Soul, omnipresent in every part of the body and all its organs.

Again, these organs are needed because of what we have called the need of *Delicacy of Presentation* of material objects to the Soul.

The Soul itself is a being of the most exaltedly refined nature separated from the material world by an *impasable* gulf of separation, a gulf which is crossed only by the *miraculous* power of the Soul, in the sense which we have pointed out, and not in any way whatever by

The World too Gross for the Soul

the bodily organs; they are confined strictly within the material sphere. But, miraculous though the power of the Soul be, it is of a very limited character. The lightning can leap from the high elevated cloud to the distant earth beneath, while the feeble current of electricity, flowing along a wire, can pass with its flash of light only over the slightest break in the continuity of its conductor. So the Soul, because of its limited miraculous power, can pass the gulf of separation between the material and the spiritual only under the most advantageous circumstances. The external world is too great and gross, as it were, for the Soul to cognize it in its greatness and grossness. It must itself be presented, reduced, refined, made delicate for the Soul's apprehension of it.

If we stand close up against the wall of a Gothic Cathedral, or close at the foot of a snow-capped mountain, we would see nothing of them. We must take up our position at a favorable point of view, where in *perspective* the cathedral, in all its beautiful proportions and rich carvings, and the mountain from base to summit may be revealed to us; if a camera, with the lens removed, be directed at a landscape no impression of it will be made on the sensitive plate, the picture is made thereon only when the scattered rays of light are gathered, and brought to a focus upon the plate; if the embossed letters, for the blind to read, were of colossal size, they would be of no value, they must be made of a size suitable for the delicate finger-tips to feel and know. So also the external world must be presented in a refined way, with proper perspective, right focus, delicate shape, suitable for the Soul, or be unapprehended by it, except, perhaps, as a confused and blurred perception.

This is the actual work which is done by our bodily organs, and which without them would remain undone.

Realities in Refined Form

Such being their precise work, it is obvious that there is no inconsistency between direct cognition and the use of bodily organs of perception. These are only instruments, which the Soul makes use of in direct cognition. They are themselves material, and their affections, activity, work are of the same nature altogether. Material in themselves, they present, in refined, delicate form, that which is material before the Soul for it to take immediate knowledge of. In this they do for the cognitive attribute that, which the nerves of volition do for the Will. These present it with nerve force so refined and delicate that it is under the immediate power of the Will, promptly responding to its mere and every mandate. The Will governs this refined, material nerve force immediately, as the cognitive power cognizes immediately the material realities presented to it, in refined fashion, by the organs of perception.

Look at the lens of the eye, so delicate that a touch may destroy it; look at the far more refined microscopic nerve structure of the retina, almost ethereal in its delicacy; look at the drum membrane and fine mechanism of the ear, with the attenuated nerve filament connected with it; look at the finest kind of nerves overspreading the finger tips, requiring high microscopical power to be discerned, and we will have some slight conception of the ethereal refinement, the almost "*spirituel*" delicacy, which is at the mysterious point of contact of the Soul with "matter," where by its *miraculous* power it oversteps the impassable gulf between the spiritual and the material and directly cognizes objective realities; for these structures, and, or rather that which falls and rests upon them with gentlest touch, which harms them not, are *the things* which the Soul takes immediate knowledge of in external perception, and from the knowledge of which it goes forth to an enlarged knowledge of the

Locomotive, Automobile Power

world, of which all these things are a veritable, an actual part.

The delicate organs are themselves perceived, but it is as the astronomer sees his telescope, while his vision is of the stars.

The reasons have thus been presented, why the bodily organs are necessary. By "necessary," however, is meant, not that external perception is impossible in any other way, but that the Soul, being, at present, what it is in itself, its endowments and its relation to the world, these organs, such as they are, or something suitable in their stead, are needed, that the Soul may cognize objective realities.

Here again reference may be made to the *locomotive*, or *automobile power*. This new word is very appropriate and yet it cannot altogether displace the old one; as the latter brings out *distinctly*, that which is of the highest importance, the translation of our entire person to most distant places. The word "automobile" is especially suited for our control and direction of the organs of perception; the movements of the eyes, nostrils, lips, tongue, head, hands, feet, the handling of objects by the play of the finger-tips over and upon them, apprehending their minutest characteristics. Without this locomotive, automobile power our knowledge of the world would be of the most limited character. Fixed to one spot like an oyster, we could not place our hands upon and learn of any thing beyond arm-reach; arms and hands would be without motion; we could see nothing beyond our immediate front outlook, which might be very circumscribed indeed; we could hear only the sounds of our own vicinity; we would be isolated from one another, knowing and communicating only with those in close contact with us, unable to impart instruction to one another, except in the most unsatis-

Organs, Why not Cognized?

factory way, and ignorant of the scenery, phenomena and peoples of far off lands. By the locomotive, automobile power we direct our vision to near and far off objects, and to any point of the compass; we enlarge our visual knowledge of distant things by going to them, with the laying on of hands and fingers; we learn from men of every character and from all climes, and we and they roam over all lands and seas, discovering their varied scenery and phenomena, and those peculiar to their over-arching heavens. It thus appears that the organs, furnishing our locomotive, automobile power, are as necessary as are the others, for our perception of the world; always remembering that we directly cognize only that, which is present to us.

To this view of External Perception it might perhaps, *be objected* that if the Soul has power to directly cognize objective realities, which are present, we ought to be able to cognize our organs of perception themselves, when they are not presenting anything to us, as when our eyes are shut, and no sound falls upon the ears; and we ought to be as well acquainted with our interior bodily selves, as we are with our outward persons; whereas we are familiar with the latter, but perceive not the former, and we have no cognizance of the organs of perception, when they are not in active operation, presenting to us sights, sounds, etc.

The Objection, however serious if unanswered, is removed as follows:

In the *first* place, as we have already more than once pointed out, the organs of perception have been constructed each for its peculiar work alone; they are unfitted for any other. The eye is for light and color, not for sound, the ear for sound not for color, even as the optical instruments are for seeing, not for hearing; the bell is for emitting sound, it can give no light. Hence

We Cognize Qualities

it is that where no light falls upon the eye, it presents nothing for us to cognize. It is itself wrapt in darkness, and, fit only for light, it can reveal itself in no other way, and must remain unknown, as the fire-flies, at a distance in the dark night, revealing themselves by their flashes of light, are without them unperceived and their presence unknown. So also in regard to the other organs. When no sound is received by the ear, it is silent with no power of self-revelation, as it reveals itself by sound alone, even as does the speaker at the far distant end of the telephone line; when his voice ceases he vanishes away. When no object even with slightest pressure and motion rests upon the organs of touch, they also must remain unnoticed, as they likewise are restricted within their own sphere of activity, like the embossed letters, which reveal themselves only by pressure and motion to the blind, and like the fish in the deep sea, which manifests its presence only by the pull and strain upon the line, which holds it captive.

In the *second* place, we cognize the qualities of objects, and not the objects apart from their qualities. Hence it is, that when the organs of perception do not present respectively the qualities for which they are each fitted, they present none by which they can be perceived. Thus when the eyes are shut, they have no light, no color, no sound, no perfume, no flavor. There remain only the qualities of figure, size, solidity in one, or more of its degrees of vapor, fluid, softness, hardness with smoothness, or roughness, but these cannot be apprehended apart from our automobile power; the organs of touch must press, move over and play upon them, or, in other words, we must in some way "handle" them; but this cannot be, as they are motionless, without pressure in themselves and are inaccessible; we cannot reach them by sight and touch. The anatomist has revealed them,

Organs not Suitably Presented

by bringing them forth from their hidden locations and examining them, as he does ordinary things.

The same thing is true of the ear, when it is not resonant with the sound, which it receives and presents, it has no qualities by which it can be discerned. Inaccessible to observation from without, the qualities which it has, such as size, shape, solidity cannot be perceived because, as in regard to the eye, it has no automobile power in itself, it is motionless and without pressure, and is also beyond our reach. The Soul is present to it, but there are no qualities which it can cognize. So also the organs, or nerves of apprehension by touch, when no object is resting and moving upon them, are destitute of qualities capable of perception.

Moreover, in the *third* place, as we have seen, the Soul, endowed as it is with cognizing power, perceives only those objects which are suitably presented to it. For example in vision, the rays of light must be brought to a focus upon the retina; the lens of the eye is as necessary for sight as the lens of the Camera is for its pictorial representations; and in "touch," by automobile power the objects, to be apprehended, must be skilfully and intelligently handled; while in hearing, sounds must be received and presented by the curious mechanism of the ear. Hence again as our organs of perception, hidden away within the body, are not thus presented, the Soul fails to cognize them, even as the scientist fails to see the microscopic world, when it is not presented to him by the microscope.

What has thus been said will be better appreciated as we bear in mind, that we do in some measure cognize our interior bodily selves and organs whenever these are suitably presented. Thus, at times, we notice the beating of the heart; we have some perception of nostrils, mouth, throat and lungs, as we expand and contract our

Their True Character

chest, taking in and exhaling long draughts of breath; we take some indefinite knowledge of the stomach, and of the organs of the abdomen from motion and pressure therein; the mouth and upper throat are more plainly revealed because of the active and thorough movement of lips and tongue, the latter moving freely over and apprehending everything within reach, and, by the use of mirrors, we can see within, and can learn also from looking within the mouths of others.

In thus considering the organs of perception, *their true character* comes distinctly and unmistakably forward. It has been made manifestly to appear, 1. That there is no inconsistency between direct cognition and perception by the use of bodily organs. These and that which they present are objective realities and we take direct cognizance of them; there is nothing intermediate between the Soul and the external realities which it cognizes. 2. It has been made obvious that the organs do not create anything, and do not transmit created impressions to the brain, there to be cognized; impressions, which created by them under excitation, have no existence apart from the activity of the organ and cease to be with the cessation of the creating activity. That which the organs present and which we directly cognize are independent, abiding, objective realities. They are what we know them to be, whether we perceive them or not. 3. The organs are altogether different from those of "sense-perception." What the operation of the former is, the operation of the latter is not, and what this is, the other is not. According to "sense-perception," the senses are supposed to receive impressions or excitations from without, and being thus stimulated, create, while thus acted upon, a sensation upon the sensorium of the brain, which is an affection or feeling of our vital organism, and which the Soul feels or cognizes, thus taking knowledge, not

In Contrast with the "Senses"

of the objective realities themselves, but of something intermediate between them and itself, and which has no likeness to the external realities, which are only their unknown cause.

As we have presented them, the organs of perception do nothing of this kind. They simply present real objects in their very similitude before the Soul for it to look upon, as we hold up an object before a mirror for it to receive and retain, as long as the object is present before it. The mirror may represent our conscious Soul, and that which the mirror receives and holds within itself may represent our knowledge of that, which we apprehend by perception. The reflection within the mirror is of the object, as it is in itself; the knowledge within the Soul is that of the perceived external reality, as it actually is in itself.

By thus holding up the "senses" of sense-perception in contrast with the organs of perception, as we have presented them, we have a better understanding of the latter, and see more clearly the truth of our presentation.

In the 4th place, it has been made plain that the body, with all its members, organs, qualities, affections, activity and work is an external, material reality, thoroughly and altogether such, and it and that which comes in contact with it are the things which we directly cognize, and these alone.

In order that we may directly cognize distant things, they must come to us, or we must go to them. Illuminated and colored objects in their true figure, motion, color, varied characteristics and their relations to one another come to us by the rays of light, which enter the eyes; far off sounds reach us and reverberate within the ear; flavors and perfumes are borne to the organs upon which they fall, and by our locomotive, automobile power we go directly to the things, which do not come

Omnipresence of the Soul

to us. In this way, and only thus, can we directly cognize them. This perception of distant things will, however, be presented again more at length. The truth here to be noted is, that we directly cognize only our body, and that which comes in actual contact with its organs of perception, and is in itself present to the indwelling Soul.

In the 5th place, it has been made apparent, that for external perception the omnipresence of the Soul throughout the body is essential. Were the Soul confined within some interior cell of the brain, it would be able to take direct knowledge only of that single cell, and that which is in contact with it. It would be profoundly ignorant of all beyond. The whole world and all that it contains would be unknown, for nothing of that world reaches the secluded cell, the confined dwelling place of the Soul. No light, no color, no sound, no perfume, no flavor and no pressure, no motion, revealing the things which are, and none of these things themselves ever penetrate thereto. The Soul must be present to the things, which it directly cognizes. It must be within the eye to behold what is there; within the ear to hear what is therein; it must be within the organs, where perfume and flavor are, to take knowledge of them, and at the very finger-tips, with its active intelligence, penetrating into and understanding the things towards which it reaches, and upon which it lays its hands.

These things being where they are, the Soul by its omnipresence must come forth to them, in the fullness of its own indivisible Self. Thus coming forth, and being present to them, it directly cognizes them in their refined delicacy, as held up before it by the bodily organs, themselves structures of extreme rarity, made thus for this purpose.

Infallibility of Perception

In the 6th place, the Infallibility of Perception and the foundation of it have been plainly stated. It is infallible, because, we directly cognize the things themselves held up before us. Our knowledge is the knowledge of the things; the two are synonymous, "the things" are our "knowledge," our "knowledge" is "the things," and hence must be correct. Just as there is perfect reliability of the mirrored reflection, and of the photograph, because they are the reflection and the photograph of the objects held up before the mirror and the camera. Astronomers have such confidence in photographs of the heavens, that they examine them at leisure, as though they were the very stars themselves.

For such perfect reliability, however, there must be a true mirror and a normal camera, otherwise there will be distortion and error; so for the Infallibility of Perception, there must be a true human Soul and a normal human body, otherwise there will be confusion and falsehood. The fundamental principle is "*Mens sana in corpore sano.*"

The alleged deceptions of our perceptions are due to the violation of this principle, to carelessness and inattention of the observation, and to wrong interpretation of the perceptions, themselves infallible. The consideration of these alleged deceptions will be presented under the head of visual perception.

The Act of Perceiving may be stated thus.

The Act of Perceiving

The omnipresent Soul, endowed with the miraculous power of stepping over the impassable gulf between the spiritual and the material by direct cognition of the latter, takes immediate and infallible knowledge of material things which, in actual contact with the delicate organs of perception, are by them held up before it,

The Soul Beholds the Reality

refined and delicate, suitable for its apprehension; and takes the same knowledge of distant things as these come into contact with the organs of perception, or as these organs approach and touch them. The act is purely spiritual, it is the Soul which beholds the reality.

The truth and correctness of this statement, and of all, thus far presented, may be illustrated and enforced, and difficulties removed by the examination of the individual organs separately. Of these the Eye, the organ of sight, affords the greatest advantage for such examination. If we gain a true conception of this, and remove the difficulties connected with it, there will be no question as to the true character of the other organs. The doctrine of Perception, which we have been presenting, will be established in its self-evident truth and beauty.

SECTION III THE EYE, THE ORGAN OF SIGHT

The Eye is so well known, that it would be superfluous to give a minute description and illustration of it. We have already spoken of its marvellously delicate construction, surpassing anything that human hands and skill can form.

The Retina is a microscopic mosaic work, formed of many thousands of minutest parts, each part a nerve of thread-like fineness and atomic length, compacted together side by side into a nervous expanse of small diameter, and connected with the brain by the optic nerve, the source of its life and sustenance. Between the brain and the retina, along this nerve, there is the flow of nerve-force, as there is the circulation of blood throughout the blood vessels. At times, when the eye is at rest from vision, this may be at its lowest ebb, almost imperceptible, like the flow of the sap of the trees in winter, or like the flow of blood to muscles, when they are in perfect quietude. When stimulated,

The Retina a Delicate Mosaic

however, by the activity of the eye in vision, the nervous energy, or excitement may be greatly aroused and intensified, and, perhaps, the scientist may actually, in some way, measure the time of passage for this along the optic nerve from eye to brain, even as the flow of blood to muscles and to brain is vastly augmented, when these are in active exercise. And on this account, from long continued effort and overwork, the vision may grow dull from exhaustion of the nervous energy, even as we know so well in our own experience, when our eyes are too tired for us to see, and need rest and recuperation, just as the tired out brain and muscles do.

But all this is purely physical. There is in it no vision, and no possibility of vision. The wonderfully constructed eye is a material thing, and the excited nerve-energy is a material force, and only such. This must be distinctly understood and acknowledged, or we go entirely astray. It is a grave mistake to suppose that the optic nerve carries something not altogether material from the eye to the brain, the assumed seat of Vision. In regard to the structure of the eye, that which especially concerns us is the fact just mentioned, its thoroughly physical character, in itself and in its activities or affections, and secondly, the Retina and the Lens. These two stand related to one another, as the lens of the camera to the sensitive plate or glass within it. It would seem, indeed, that the Camera has been modeled after the eye and is a wonderful copy of it. It serves as a most excellent illustration of the eye, and enables us to understand its operation and how we see by its instrumentality. So close is the correspondence that the Camera may be regarded as affording an actual, visible demonstration of "perception by sight."

The hollow sphere of the eye corresponds with the box of the camera, the fact that it is angular is of no

The Camera a Demonstration

consequence, it serves the same purpose as though it were spherical. Both of these have a dark interior, the box of the camera is lined with black and every trace of light excluded. At the front of the eye there is a lens with power of change and adjustment of focus, adapting it to near and distant objects; by automatic action, the pupil enlarges and contracts according to the less or greater intensity of light, and by the eyelid, with instantaneous quickness, the light is permitted to enter or cut off at pleasure.

In a most carefully exact manner all this has been imitated and reproduced in the camera. It has at the front a lens which, though in itself an unchanging piece of glass, has its focus changed and adjusted for near and distant objects by especial construction of the camera dark box; arrangement is made by a peculiarly contrived shutter for the greater or less intensity of light, as is done by the contracting and enlarging pupil of the eye, and by automatic action of delicate mechanism the shutter, with eye-lid-like instantaneous quickness, gives exposure to the light of such length of time as is desired from a fraction of a second to some minutes in duration; still further the lens is made achromatic, as is also that of the eye.

Moreover, by automobile, locomotive power—the eye is elevated, or depressed, turned to all points of the compass, and is placed nearer, or further from different objects for the proper point of view, and carried to far off places. So the camera is directed at pleasure, and is put in position for right point of view, and nearer and further from the objects, and is carried everywhere.

Again, at the rear part of the eye opposite the lens, there is the retina, a most delicate expanse of nerve mosaic, so also in the same position, within the dark interior of the camera, there is the “sensitive plate,” or

Of Perception by Sight

piece of plain glass. These and the retina serve the same purpose, they receive the picture thrown upon them through the lenses.

Such being the structure of both eye and camera, their active operation is the same. They have both been made for and adapted to light and its color. The camera being properly adjusted, the light radiating from every point of the object before it, however simple or complicated it may be, enters the interior of the camera through the lens, and is by its peculiar power brought to a focus at and upon the sensitive plate, or glass and thrown upon it with the exact figure, proportions, coloring, movements, characteristics down to minutest detail, which are in the object from which the light proceeds, a true reproduction of the external picture, or phenomenon, as true as is the reproduction, or reflection of the face in the mirror.

This is the precise statement of that which takes place also with the eye. To know and understand the one is to know and understand the other. As with the camera, the eye being properly adjusted, the radiating light from the object before it, however simple, or complicated it may be, enters the dark interior of the eye through the lens, and is by its peculiar power brought to a focus at and upon the retina, and thrown upon it with the exact figure, proportions, coloring, movements, characteristics, down to the minutest detail, which are in the object from which the light proceeds, a true reproduction of the external picture, or phenomenon, as true as the reflection in a mirror, as true as the reproduction of the external object on the sensitive plate, or glass of the camera.

Such is the operation of both the camera and the eye, but thus far there is no "*sight*" in either the one, or the other. The camera and the eye are both alike and

A Living, Spiritual Presence

equally mere material things, and the entering focused light, and produced phenomena on sensitive plate, or glass and retina are no less purely material also. Should the correspondence between the camera and eye end here, we would have no presentation and illustration of "*seeing*." In fact the correspondence does cease here, if we consider the camera as it is in itself alone and the *photographic* purpose for which it was made. The eye does also indeed photograph, but only to a very limited degree. There is a retention of the picture on the retina for a brief moment; this is called retention, or persistence of vision, but the picture on the sensitive plate of the camera remains as long as kept in the dark, and permanently in the light when developed.

We may, however, lay aside the camera as a photographic instrument and use it as an instrument of sight, and the correspondence between it and the eye emerges again. The sensitive plate may be removed, and the glass of which we have spoken be in position with the *living* photographer, the cloth enveloping his head and camera uniting them as one, looking, not through, but at the glass and upon the picture thrown upon it. Here there is the introduction of a new element, a *living spiritual presence, beholding that which is*.

To this the eye presents a striking resemblance. The eye also has this additional element, a *living spiritual presence* united with it. The Soul, with its miraculous cognizing power, is present to the retina, as the photographer is at the glass of the camera, and looks, not through, but at the retina and upon the picture thrown upon it, *beholding that which is*, even as the photographer does, as he looks upon the picture on the glass of the camera.

Thus it is that the camera gives an *actual, visible demonstration* of Perception by Sight.

At both Eye and Camera

It would seem, as though nothing could possibly be more plain than this. The deep mystery of the Soul's cognition, rightly called miraculous, remains as deep as ever, but accepting it as a known fact, the explanation given of "perception by sight" is clear, intelligible, easily apprehended, unobjectionable, and commends itself as altogether worthy of acceptance. It is immeasurably superior to any other that can be given, and has the most positive support of the testimony of Consciousness and of the assurance of all men that light and color with its expanse, its figure, motions and varied characteristics are directly cognized as external realities. The explanation in its simplicity and rare beauty is self-evidently true.

From this demonstration it is evident that the eye is only a material instrument, as much as and in the same sense as is the camera; that the omnipresence of the Soul is essential, it must be at the eye, that there may be "sight" thereby, as truly as the photographer must be at the camera that there may be "sight" by it; it is evident that the thing which the Soul directly sees is not that which is and *remains* at a distance, but that which by the entering light, coming from the distant object, *enters into* the eye and by the lens is thrown upon the retina, the very same picture or phenomenon as that from which at a distance the light proceeds, as truly as that, which the photographer *sees*, is the picture which the light, entering through the lens from a distant object, throws *upon* the glass of the camera *at* which he looks.

It is also evident that in both cases "sight" is a purely spiritual act. It is the *living* Soul that *sees*—it is the *living one* at the camera that *sees*. It is further evident that in both camera and eye the external object is presented in most refined, delicate form for the seeing one, and that color, expanse, figure and motion are placed

Two Questions

upon glass and retina alike. Those, who have looked for the first time upon the glass within the camera, have been surprised and fascinated by the minute delicacy of the picture thereon of the wide-spreading landscape, with its mountains and high massive clouds, a marvellous miniature indeed, a fairy picture. But this is gross and coarse compared with the extreme delicacy of the picture on the retina of eye.

Two Questions, involving more or less of difficulty and objection, here arise. If in visual perception that which we see is only the minute picture, microscopic in its details, upon the retina within the dark interior of the eye, how can we be said to directly cognize the things of the external world, and not merely a minute picture or representation of them, as would seem to be the case, if this statement as to perception be true? *Secondly*, How is it that, seeing only the minute picture on the retina within the eye, we seem to look off, and firmly believe that we do look off to the far beyond, beholding all things in their true size, the world in its grand proportions, the boundless plains and oceans, limitless forests, long lines of mountain ranges, the cloud-piercing mountain peaks, the heavens on high and suns and stars in the depths of space?

In answering these questions we answer also the further one of how we see distant objects, which is the same question in other words.

The First of the above Questions.

It must be remembered that there is an impassable gulf of separation between the spiritual and the material, and that the eye and all within it belong to the latter. The retina with the expanded, figured color upon it is material. We do not have to go beyond the eye, and the body to obtain objective reality. Hence it is, that

Distant Objects Enter into the Eye

when we see the pictures upon the retina, however minute they may be, it is literally true that we are directly cognizing things of the external world. Still further, however, we now have before us that, which is of deepest interest and wonder. When we look upon that which is on the retina in the dark interior of the eye, we are not looking upon a *picture* or *representation* of distant objects, but upon *those objects in their own true selves. They are themselves brought into the eye and placed upon the retina for us to behold. They enter the eye, and are there seen just as the distant sound travels through the air, enters the ear and is there heard itself, not a representation, or reproduction of it.*

When we *see* the world, we look upon *phenomena*. This word, however, does not mean a mere appearance. It is to be taken in its acquired, and technical sense, as it is constantly used. It designates a *manifested reality*; a *substantial effect* which is produced, an effect which has an abiding being.

Thus we have the phenomena of earth's scenery; the ice and snow are the phenomena of Winter; the buds, opening leaves, blossoms are those of Spring; flowers, trees in full leaf, fruits, harvests those of Summer; variegated foliage and falling leaves those of autumn. The dark black clouds, hurrying onward, the howling winds, the vivid flashes of lightning, the crash and rolling of the thunder are the phenomena of the thunder-storm; the desolate sandy plain traversed by a caravan of camels are the phenomena of the desert; there are also the phenomena of light and the phenomena of the heavens, the constellations of the stars, conjunctions and eclipses. These are not mere appearances, they are effects produced, *they are realities*. The stars are so arranged, that they have the relative positions which form the well-known and *real* figures of the constellations, though in

We see Manifested Realities

a lineal direction away from us they are millions of miles distant from one another. The phenomena of conjunctions are equally real; the planets do touch and pass one another, though they are millions of miles apart in the other, lineal direction; just as two trees, far apart in one way, are so near one another that a rifle-ball shot at them could not pass between them. The phenomena of the eclipse are real, the sun and the moon are in such actual positions, that the moon touches and passes over the face of the sun, cutting off its light from us; it is a real effect which is produced, and not something only imaginary and true only in thought; it may be photographed, which imagination and thought cannot be. It is no more true that the sun and moon are far apart in one way, than that they are in contact in another. It is just as true that the one is in front of, or behind the other partly, or altogether, as that they are millions of miles distant from one another in being thus placed.

It is these *manifested realities*, substantial effects, phenomena which we see, when we look upon the things of the world.

But all phenomena, so far as they are *visible*, are phenomena of light and color. We see nothing but color, with its essential properties of expansion, figure, motion; light and color are one and the same. This is all that enters the camera and falls upon the sensitive plate, or glass; and this is all that enters the eye and falls upon the retina, as far as "*sight*" is concerned. Let there be, in plain view before us, an officer in full uniform, brilliant, gorgeous, seated upon a magnificently caparisoned horse, of some conspicuous color. When the light of the sun falls upon them, it *makes* them all that we see. If that light be withdrawn they are dark, black, invisible. The moment the light strikes them, they are seen in all their variegated, brilliant coloring,

Visible Realities Only Light, Color

with forms, features and complicated configuration, in minutest detail, with every movement of horse and rider, which may take place.

The object *seen* is nothing but *the color*, and its attributes, which comes and goes with the coming and going of the sunlight. But all is in a state of flux. With unbroken flow the light streams from the sun, and, striking upon horse and rider, is there broken up into proper kinds and shades of color, according to the nature of the surfaces upon which it falls, and there assumes the complicated shapes and configurations of horse, rider and their adornments, and moving with every one of their motions. But the light which thus strikes upon these objects and assumes, in so doing, the shape and characteristic coloring and motion due to them, is as quickly, and with unbroken flow, radiated from them, retaining the same shape, coloring, motion, and, reaching the eye, enters into it and places *itself* upon the retina, the very same external, objective reality, which that instant had been at a distance, touching horse and rider, and is *now* touching the retina. In cognizing the phenomenon on the retina, we cognize, not a picture, or representation of it, but the *very phenomenon itself, which being at a distance is carried into the eye*. And as the flow or radiation of light is uninterrupted and the velocity for such short distances instantaneous, there is unceasing transfer of the distant, visible object, or phenomenon into the interior of the eye, as long as the light continues and the object is in view.

Thus it is actually true, that we see the distant, external reality *its very self*.

It may be stated thus—The visible external reality is *light, with its color*; we see *these* because *they* enter into the eye. The visible external phenomenon of the horse and rider is the effect produced by the sunlight falling

Light and Color Illustrated

upon them, and this same produced effect, remaining and unchanged, passes by radiation to and upon the retina.

It cannot be objected that, this being so, we see not the horse and rider, but only colored representations, or "casts" as it were, of them, sent off from them; for it is well known that we cannot cognize "substance," but only its manifested qualities. We cannot see the substance of horse and rider, but we do see their true qualities, their figure, proportions, characteristic coloring and movements, as they actually are.

Illustrations. 1. Stars. To show how true it is, that we see only light and color, we may refer to the stars. These are so far distant, that light requires thousands of years to pass from them to us. When we now see them, it is as they were these thousands of years ago, when the light and color, which now enters our eyes, radiated from them and entered upon their long journey, and the stars themselves may have been destroyed thousands of years ago, and yet we still see them, and will continue to see them till the last radiant light and color which left them has come to us. The visible *real* phenomenon has its continued being in the *real* on-moving light and color. Thus in seeing the stars, we see only light and color; equally true is it that in seeing other things, we see only light and color also, light and color having the configuration and variegated characteristics radiated from and due to them.

2. Another illustration will make this the more evident. Let us have three solid, spherical balls of ivory, silver, and wood. Let these all be completely gilded with gold-leaf of the finest thinness. They are all visible. We affirm that we see these *balls*. But we do not see the ivory, silver and wood. We see only the spheres of the attenuated gold-leaf, and even of this we do not

By the Stars and Colored Objects

see the substance of microscopic degree of thickness; we do not look through it, and see the other surface of it, but only the outside form and color. The solid ivory, silver and wood may be annihilated altogether, yet the spheres of gold-leaf might remain in unimpaired integrity, and it would be as true as it was before that we *see* the three balls. Or the three balls might be painted each with a different color, and whether the ivory, silver and wood remained, or were destroyed, leaving the coat of paint uninjured, the objects *seen* would be the same. The same is true of a house painted all over its exterior. The house might be destroyed, leaving the paint with its configuration and coloring untouched, and we would *see* the building as truly as we did at first. The self-evident fact is, that the *visible* objects which we *see* is light, having the configuration and coloring etc. due to that substance upon which it falls and by which it is radiated.

Instead of covering the balls with gold-leaf, or giving them and the house a thin coating of paint, let the solid ivory, silver and wood and the material of which the house is built remain untouched, and let the sunlight, holding all colors hidden within its own being, fall upon these things, and it will give them a covering more ethereal than the finest gold-leaf, illuminating them with appropriate, figured coloring and *making* them *visible*, otherwise as black and invisible as the darkest night. The horse and rider, which we have been contemplating, are visible only when illuminated with the colors, thrown upon them by the sunlight and by them radiated into the eye.

3. The beam of light from *Stars* long since destroyed, besides showing that we see only light and color, illustrates also the fact, that the *visible objective reality* is carried by radiation into the eye and placed upon the retina. It is a mistake to suppose that this object is

Cross-Section of Beam of Light Illustrated

only at the distant object, and at the retina, as though it were reproduced there. It is *at every point* along the entire length of the beam of light. This is the reason why it reaches the retina. The visible figured, colored object is *ever placed anew* upon it, by the ever on-moving beam of light, the cross-section of which, from one end of it to the other, is this *figured, colored-object itself*; and this is the reason why it may still be placed upon the retina, long after the star has been destroyed and while the beam of light, having this fixed cross-section, continues. In the case of the single star, the figure may be of the utmost simplicity, that of a mere point because of its extreme distance, but there might be the figure of a binary star, or of a constellation, all the stars of which have been destroyed.

The figured, colored object is invisible, if the beam of light be viewed from one side, but is seen if the line of sight be directed along the axis of the beam of light and at any point of its entire length. Thus in looking at the star it is seen whether we go further away from or nearer to it. The beam of light takes its figured, colored cross-section from the object upon which it strikes, and from which it flows, bearing the figured color of the object, that is, *the visible object itself*, to the retina of the eye. It is only in this way that the continued visibility of stars, with their peculiar characteristics, which have been destroyed can be explained.

Thus it is that such stars give not only an illustration, but a demonstration of the true character of the only visible thing, the beam of light with its figured, colored cross-section, and of the fact that the distant *visible reality* is "figured color," and *comes to us* in the beam of light, enters the eye and is there directly seen.

4. Of this the *Magic Lantern* gives another illustration for nearer objects than the stars, and for the con-

by Stars and Magic Lantern

tinual variation of visible things, the beautiful ever-changing phenomena of the world, the moving panorama of the varied scenes of Nature, now brilliant and gorgeous with variegated coloring, and now sombre with deepening shadows and with the darkness of tempests and of night.

The beam of light from the stars is unchanged, practically so, but the beam of light from the Lantern we can manipulate at pleasure, making its figured, colored, moving, characteristics what we will. The great advantage afforded by the Magic Lantern is, that we can bisect its beam of light, at any point along its course, and make its cross-section distinctly visible, revealing its character; while we cannot do this, as readily and impressively, with the beam of light from ordinary things. In the Magic Lantern, the light is thrown forward through the painted slide, and then through the lens and the open space beyond to the far distant sheet, upon which it falls, placing thereon the painted picture on the slide, in full view of the spectators.

Here, as with the light from the stars, we have it demonstrated that the "visible thing" is only color, with its properties, or characteristics.

The room is made as dark as possible, it is a dark-lantern which is used; with its shutter closed, no portion of the sheet is seen. The shutter is opened, the picture appears. The colored presence comes and goes with the opening and the closing of the shutter; it is the only visible thing; without it all is black. The light in the lantern represents the sun, the painted slide represents the distant visible object; the lens, the lens of the eye, the picture on the sheet that on the retina, while the beholding Soul is present in the seeing spectators. The thing seen is not a *reproduction* on the sheet of the painting on the slide. The painting *in itself* is *black* and

Object Seen not a Reproduction, but

invisible. It receives its coloring from and is *made* visible by the light. The *visible* thing, on the slide, is the beam of light, which assumes the *figure* and the *disposition* of its own inherent colors, due to the character of the painting through which it passes; and, with this figure and coloring, it goes forward and places *itself* on the sheet, the very same thing which it was when on the slide from which it has come. In seeing it, the spectators see the visible colored object *itself* on the glass slide.

Thus it is also that the object on the retina, which the Soul sees, is not a reproduction of but the very same object, which is at a distance. The one thing seen is the figured and colored light, which comes from a distance and rests upon the retina,

By actual experiment, we can show that the beam of light, from the lantern and resting upon the sheet, has the same figure and coloring throughout its length. It has it as it is on the slide, and as it is on the sheet. But that on the sheet is its cross-section at that point. Take the sheet away, and the beam of light will pass beyond, and at the greater distance may be again caught upon the sheet, with the same figure and coloring at that point of its course. Again, if, as it rests upon the sheet, the head, or hand of some person be placed within its rays, anywhere between the lantern and sheet, they become colored with its coloring; or the perfect picture may be intercepted and revealed at any place by the introduction of a screen. The beam of light has the same cross-section everywhere. Made up of these, placed close together in infinite number, for they are without thickness, they are one after another, with the instantaneous velocity of the on-flowing beam of light, borne from the slide, within the Lantern, and placed upon the sheet in full view of the beholder.

5. Thus we have demonstrated *the true character of*

Placed Anew on Retina Every Instant

the beam of light from the lantern, and of every beam of light radiated from visible objects. Thus, for example of the latter, I am now looking at an engraving of a full length portrait of Daniel Webster standing erect; immediately around it is a border of white paper, bordering this is a gilt moulding, with a wide light-colored black-walnut frame, whose outside edges and corners are of very dark embossed work. The light, falling upon all these, assumes their shapes and minute characteristics, and *gives* them their various coloring, and is radiated to my eye, having for its cross-section at every point along its course the visible framed, engraving *as it is*, as it hangs upon the wall before me, and as it rests upon the retina within my eye, where it is placed anew every instant by the beam of light of instantaneous velocity. That such is the character of this beam of light is revealed by a mirror, placed anywhere between the engraving, on the wall, and my eye. It will intercept and give a cross-section of the beam at that point, receiving and showing it on its own face; or, if the light be sufficiently strong, reflecting and casting it visibly upon another place on the wall.

In regard to the external reality itself entering into the eye, vision does not differ from perception by the other organs. Thus distant sound is not heard till it reaches the ear. I have often watched, as doubtless others also have, a carpenter hammering at a distance, and could see the hammer fall an appreciable time before I heard the sound of the blow; the light having greater velocity than sound, *the visible reality* came to my eye before the *audible reality* came to my ear.

Here it may not be objected, that as the light passes through the lens and is by it brought to a focus and then thrown upon the retina, it is a reproduction, or picture of, and not the external object itself, which we see; be-

Objective Reality of Light and Color

cause we all know and acknowledge that, though the lens of the telescope and microscope bring to a focus the light as it passes through them, none the less the astronomer sees the *stars*, and the microscopist sees the *things themselves* of the microscopic world. *The visible objects themselves pass through the lenses.*

The illustrations, which we have given, answer the first question above stated. "If we see only the minute picture upon the retina within the eye, how can we be said to directly cognize the things of the external world?" The illustrations show, that it is literally true, that the things of the world are directly cognized by us, and make it plain how this is so.

But it is evident, that the explanation depends upon the objective, external reality of light and color. Color is within the eye resting upon the retina, but it is there, because it is *first* in the sun and *spread out upon* every visible object in Nature.

a. We have all along been insisting upon this fact. We have established the *Objective Reality of Light and Color* by the unmistakable testimony of Consciousness to this effect, and by this testimony as interpreted and understood by all men. This reality has now been brought distinctly forward by the illustrations given, which show conclusively, that the only thing which is seen is color. The light from the stars, which may have been destroyed ages ago, is real. As the stars themselves no longer are, the beam of light is the only reality, and the reality which astronomers observe and upon which they found their calculations, as far as these stars are concerned. The only thing which they see and carefully observe in any case is the bright, variously tinted light of the stars. If this be subjective, real only as a feeling, or sensation within our vital organism, there are no stars of light, no visible spangled heavens, no shining, glorious

Otherwise All is Blackness

constellations, nor would there be the mid-day glory of the sun, nor gorgeous coloring of the skies and clouds of the rising and closing day. There might be, perhaps, ethereal vibrations everywhere, but the overarching heavens, by night and by day alike, would be as black as the blackest darkness can be; the affirmation of which no one can be made to believe. The abiding assurance which all men have is the assurance founded upon our *observation*, that there is a universe of shining stars, bright with the brightness of their own light, a brightness, which is independent of human sight and which would remain unchanged and undiminished did the eye of God alone behold it.

b. The illustration from the Lantern also, brings distinctly forward the objective reality of "light and color." We have carefully shut out from the dark room everything, but the one colored beam of light thrown upon the sheet; there is nothing else with which we have to do. If color be not real, there is no visible reality in the room whatever. The beam of light, the colored picture on the sheet, the light in the Lantern are all dark, black and unseen; they are but vibrations of the invisible Ether, the bright coloring within the room is all imaginary. The affirmation of such blackness no one can be made to believe. Certain it is that if color be not an objective reality, there is nothing visible in the dark room of the lantern exhibition, not even the so-called primary qualities, thus—

The sheet is perfectly plain, not a line drawn upon it. Of the figured picture thereon the size, shape, expanse, outlines, configurations, movements, such as may be introduced by the use of mechanical slides in the lantern, are all of the color. They come and go, as the beam of light, in which they all are throughout its length, is thrown upon and taken from the sheet. They can have

Our Concept of the Reality "Color"

no more reality than the color, to which they belong and of which they are the qualities, has.

c. The objective reality of color is still further proved by the demonstration, which the Lantern gives that it *has* these qualities. As shown by the cross-section, which may be made anywhere, they are all in the beam of light as it leaves the lantern, as it strikes the sheet and in the open space between the lantern and sheet, where there is nothing but the beam of pure light alone.

There in the vacant space is the pure light, having within itself these essential qualities of the material reality.

Again—The true objective reality of Color is proved by External Perception by Sight, inasmuch as it is essential to it.

It has been made evident that we perceive external realities by the direct cognition of them. By the organ of Sight the *one only thing*, which we cognize, is color. If color be subjective, it and all that pertains to it must be subjective also, and we, in cognizing it, cognize only that, which is subjective; external perception is reduced to zero. It is only upon the supposition, that color is an objective reality that external perception by Sight is possible. *Color alone* is before us in vision, we directly cognize it and its qualities, and in so doing behold *these realities* of the external world. If these be not real, there are no realities presented, for us to behold by sight.

The Objective Reality—Color. How then are we to conceive of this objective reality—"Color," as it is visibly spread out over the whole face of Nature in all its innumerable tints and tones, and shades and varieties, and in all its endlessly diversified shapes and figures, and ever varying phenomena, appearing and disappearing, as we look upon them, colors and colorings shading into and displacing one another?

The Quality of Ethereal Vibrations

Scientifically, we are to think of "Light and Color," as the vibrations of the universally prevalent Ether. But the Ether is *dark, black* and *invisible*. So also must its vibrations be, unless the ethereal vibrations have some manifested quality, or produce some real phenomenon. This quality, or phenomenon is Color, which *we see, because it has real being*. It is the manifested quality of light, it and light are one, and the same.

Light with its Color, comes from the Sun, and touching every object throughout the world, gives to each its appropriate coloring, which it withdraws again, as it departs leaving all things in their own blackness. Light is the mystic painter of the world, decorating it anew every day and changing its marvellous coloring, as the hours and the moments go by. Perfectly black in itself, the world receives all its marvellous coloring and visible beauty from the magic touch and work of the light.

That all things are in themselves perfectly black, and have their colors only as the light rests upon and colors them, is an assured fact. There is and there can be no proof, that colors remain on objects in the dark. The only proof, that we have, that they are on them in the light, is because we *see* them there. But this proof is entirely wanting in the dark, and no other is had in its place. To assume that they must remain because, being on the objects, we always find them there the moment the light strikes them, however rapidly we move them from dark to light backward and forward, and that the light simply reveals them, is a mere assumption and an attempted explanation of the appearing and disappearing of the colors. The only thing proved by such experiment is, that the colors are present when we *see* them. As far as the proof from sight is concerned the conclusion is established, that they are present when visible and absent when invisible, and that it is the light which

Proofs that their Color is

gives them. This conclusion becomes irresistible when we know that light is color; bathed in the flood of shining color the objects receive their coloring from it.

It cannot be said, that in the same way we might conclude that the figure and the solidity of the objects also vanishes away in the dark; for by touch we know that they remain and there is nothing in the light to give them their solidity with its figure.

That their Color is given to objects by light is *proved*

1. By the fact that they have color in the light and that there is no proof that they have it in the dark. As far as we can discern, they are then perfectly black. This is a beginning, and is in accord with the fact to be proved.

2. The colors are according to the character of the light, having one tone of color in the sunlight and another in artificial light and according also to the character of the latter; the white and the mellow yellow light giving different tones of color on the same object. At times a blue is thus made a green, because the yellow rays of the artificial light are comparatively stronger than the blue and are radiated together with the blue rays, the combination being green.

3. By the effect of special lights of one color, as "Bengal-Lights." When lighted at night, if red they throw their red color upon trees, houses, everything; if yellow they make all things yellow; if green all things are made green. Objects cannot have their ordinary colors which they have in composite light, because no such colors are thrown upon them by these single lights. They can select and radiate their individual colors only when these are contained within the light which falls upon them, as is the case with ordinary light.

4. By the colors on the clouds at sun-set, and at all times, changing as we look upon them. The clouds, dull grey in color, become brilliant with gold and red

Given to Objects by Light

and purple as the sun sinks behind them; and as it sets, it withdraws its light and with it all the gorgeous coloring, throwing, as a farewell, a rosy tint over clouds and sky, but for a few moments only, as this color also must depart with the departing light. Of the driver of the Sun, as the day closes, it has been said,

“But rushing through with rapid car,
He left the golden gates ajar,
And still his light comes streaming through,
Tinting the clouds with purple hue.”

All the sun-set colors are in the sunlight.

5. By the rainbow, which is nothing but pure light broken up into its own rainbow colors by the particles of moisture in the air; also by the flash of lightning which is light, with its color of dazzling yellow brightness.

6. By the prismatic colors thrown on the wall by glass prisms, and in the prisms themselves. Here we have nothing but the clear, colorless glass and the light with its own colors; these being, not only on the wall and on the prisms, but also at any point in the beam of light between them in the air. This rainbow beam of light colors every thing upon which it falls.

7. By the bright fire-color of the burning logs, and coals of a wood fire. The brilliant colors all depart and the charred wood and coal turn to the blackness of charcoal, when the fire is extinguished by water.

8. By the iridescence of “Mother of Pearl,” and of Steel Buttons ruled with microscopic lines. The former is due to the prismatic action of the surface of the “Mother of Pearl,” and not to any possible coloring of its own. The Steel Buttons are totally devoid of the prismatic colors, which are due to lines engraved upon them; these break up the light, as is done by the Mother of Pearl, in imitation of which it was made.

Proofs Continued

9. By the Mirror held up before a painted landscape. It will have the *colored* painting on its surface and might, if the light were strong enough, throw it upon another wall. The color on the wall and on the mirror all come from the painting, and *hence all must be in the light*, for the mirror receives and reflects nothing but light. Moreover, the picture, thrown on the wall, is pure light, that on the mirror is pure light, that which the painting radiates as it pictures itself on the mirror and thence on the wall, is pure light; and, as the painting is not self-luminous, the light which it radiates is that which falls upon it, in which the colors must be and with the withdrawal of which they must depart, unless the painting *imparts* colors to the light, of which there is no proof, while we know that the light may have color as it has on the mirror and on the wall; and it may be demonstrated to have it before it touches the painting, by the introduction of a clear glass prism, or a ruled steel button.

10. By the "Magic-Lantern." The colored picture exhibited on the sheet is nothing but the cross-section of the colored beam of light, and is there only when the beam of light is thrown upon it.

11. By the experiment of colored objects, gradually moved from bright light, through declining light to darkness. Take a ball of any color, red for example; in a bright light, the color is brilliant and decided; as you diminish the light slightly, the color is not quite so bright, a shade has fallen upon it; as you withdraw the light yet more, the color becomes a deeper, darker shade, step by step, till with the entire withdrawal of the light it deepens into black. If within the dark interior of a deep cave, the ball may be held up against the bright distant opening of the cave, and be seen as perfectly black. Reversing the process, the black and the deep shades of

All Objects Colorless, or Black

color brighten into the brilliant, decided red again, as the ball receives more and more light, and with it more and more color. All the dark shades of colors are due to the diminished amount of light, radiated by the objects. They are not different, but *diminished* colors.

[5] These instances give *positive proof that light is color*; that it throws color on objects; that it cannot fall upon anything, without giving color to it; that objects cannot radiate light, without radiating its color; and that "the individual coloring" of objects is according to the character of the light, which illuminates them and that they cannot have their own peculiar colors, unless these colors be in the light which falls upon them.

Accordingly, nothing can be more assured than that objects are in themselves *colorless* or *black*, which is the same thing and have their distinctive coloring only as *the light gives it* to them.

In some of the instances given the colorlessness, or blackness is self-evident. Thus, when the light is withdrawn, the burning wood of fiery red turns to the blackness of charcoal; the prismatic colors leave the glass prism colorless, and the wall plain, or black as the case may be; the sun-set glories turn to clouds of darkness; the rainbow leaves nothing but the dark storm cloud; the path of the mid-night flash of lightning is as black as the surrounding night; in themselves "Mother of Pearl" and the Steel Buttons are objects with a peculiar colorless surface, they have lost their iridescence entirely; the sheet of the "Magic-Lantern" becomes as black as the darkness of the room. In all these the blackness, or colorlessness of the objects is demonstrated; it is impossible to say that their colors *remain* and need only to be *revealed* by the light.

There is, indeed, a proper abiding coloring of things. This may remain unchanged for indefinite periods, as in

Proper Abiding Color of Things

the paintings of ancient Egypt, of Pompeii, of Rome. But this is in the character of the surfaces; these are such that they separate the rays, or break up the colored beam of light and radiate only those of the colors appropriate to each surface, as the glass prism does, or the steel button. As long as these surfaces remain uninjured they *become colored* by the light with "their own" coloring the moment it falls upon them, even as the "Mother of Pearl" and the Steel Button immediately *assume* their iridescence in the light.

Colorlessness and Blackness are the same. Practically "Black" may be regarded as a Color, because *absolute absence* of light is difficult to obtain. Ordinary blacks are, almost in all cases, darkest shades of some color, as is expressed by the terms so often used, "a blue-black," a "green-black," a "purple-black," a "dull brownish-black." In these, the light of these colors has been reduced to an extreme limit, but something of it remains and such blacks have color and some degree of visibility. An absolutely jet black is the negation of color and is invisible.

This might be shown by cutting an opening, of any shape, in a paper, or a board, held up in open space, on a dark night and illuminated by a strong light. The paper, or board would be seen with the figured opening perfectly black, surrounded by the brilliant coloring; the black itself is a vacancy. Perfect Black is absolute zero of coloring, even as scientists speak of absolute zero of heat, which is far below the zero of our thermometers.

The whole question, as to the colors of objects, is of no concern to those, who hold that color is a subjective sensation. For these the objects have no color; the whole world is perfect blackness by night and by day. Assured, however, as we are, that color is a true objective reality, the question is one of the utmost importance,

Agrees with the Science of Light

for we must understand and explain the problems which it presents. The fact that there are such problems, and that we can explain them, is further proof of the objective reality of color.

The universal testimony of man, that objects retain their *colors* in the dark, cannot be adduced to prove that this is actually the case; for the general opinion of men is to be relied upon, only when it is founded upon immediate cognition, or consciousness. But the coloring of objects in the dark is beyond the realm of this. We cognize the coloring in the light, beyond this our cognition does not go. The general opinion that objects retain their colors in the dark is a mere supposition, founded on the fact that they always have them unchanged when in the light. The paintings of the great masters, Michael Angelo, Raphael, Murillo are to-day what they were when first painted.

What has been said of "Color" is in accord with the *Scientific Theory* of light, and receives confirmation from this agreement.

According to it, all colors are within the light, and different colors are manifest according as they are separated and one, or more of them radiated, while the others are absorbed, or intercepted. Thus, light passing through a ruby glass is red, because such is the nature of the glass, that it allows only the red rays to go through it; the glass is not red, nor does it give color to the light; the blue, yellow and green glasses intercept all the rays, but those of these colors. And when light falls upon a red surface that surface is red, because it is of such a character, that it absorbs all but the red rays, or radiates only these; and so in regard to all colors. The sun shining through a fog is red, because the rays of the other colors are absorbed by the moisture.

Color, being thus manifestly a *material reality*, which

How we See the External World

is carried into the eye and there directly cognized, a satisfactory answer is given to the first of the two questions mentioned. How do we see the external world?—thus—

The whole external, material, visible world is a world of color, with its varied characteristics, or attributes. This world of Color is an objective reality and is such as we know it to be, and *in its whole and very self* is borne every instant, while we look at it, with light's velocity into the eye and placed upon the Retina and there presented to the omnipresent Soul, which sees it.

To appreciate this there must be clearly borne in mind the conception of Color, which we have given, and the truth of which we have proved. Color is an objective reality, the *manifested quality* of Light.

The Second Question.

How is it that, cognizing only the minute picture on the retina, we look to the far beyond and behold the great world in all its grand proportions?

The answer to this involves the construction of our conception of the world, and the combination and co-ordination of the perceptions through the different organs.

It is to be remembered that sight and all our external perceptions are purely an intellectual act; it is simply our taking knowledge of that which is, and it is a great mistake to suppose, that the conception, which we have of the world as we behold it by any one organ, is due entirely to that which we perceive by it. Thus, for example, when I see the horse and rider, of which we have spoken, I immediately conceive of them as a living horse, of flesh and blood, with a smooth soft coat of hair, and a living human being, with his body of flesh and blood and with his indwelling intelligent soul, though I could never have discovered all this by a mere look at them from a distance. Practically, therefore, sight reveals to

Sight Reveals more than We See

us far more than that, which we actually see at the moment.

As with the horse and rider, so with the world, as we look forth upon it. Because of what we otherwise know, the conception of it which we frame in our minds, as we look upon it, includes far more than can be obtained by sight alone. Vision being an intellectual act, we, in seeing the world, combine all our knowledge with that which comes to us by the eye, and thus form our Vision of the world in its full perfection, a *vision which is true to the reality*.

By sight we cognize the minute picture on the retina. This is our *knowledge* of the *visible* external world. It is the true and exact knowledge in detail of its phenomena, its lights and shadows, its variegated colors, its configurations, changes, movements, the relative shapes, *sizes*, proportions and positions of all the world contains. With this knowledge, we form a definite conception of the *visible* world as it is.

Being an intellectual act, this "conception" has no size, great, or small, no more than has a "conception" formed from a description given in words, or in some other way, and affords no means for the determination of *actual* size. I may have before me on the table a map of Europe. This may give the outlines of the continent and its adjoining islands; the deep indentations, forming its gulfs, and channels; the relative shapes, *sizes*, positions of its different countries, its rivers, lakes and mountains. I thus form a true conception of the continent, Sweden and Norway, Russia, Great Britain, France, Germany, Austria, Spain, Italy, Greece and the great Mediterranean Sea. But the map is a minute, insignificant thing. It gives me no intimation of the size of Europe. Size is altogether comparative. I must have a map of the world to learn that, with the excep-

Size Comparative

Map of Europe

tion of Australia, Europe is the smallest of the continents; and there must be exploration, and comparison with some standard of measure to learn more as to the size. Thus we learn that its coast line is thousands of miles in length, its territory hundreds of thousands of square miles in extent, its mountains thousands of feet in elevation; and here, again, all depends upon what we are to understand by a foot, and by a mile.

Like the map, the picture on the retina is very minute, but as the former, with knowledge otherwise obtained, gives us a true conception of Europe in its great proportions, so the latter gives us the true and enlarged conception of the world, when the knowledge, which it affords is combined with that from other sources.

We can form no conception of the size of what we see, except by comparison with some standard of measurement. Sight gives only the *relative* sizes of the things seen. These are all perfectly given, minute as they all are, on the retina; men, trees, mountains, clouds all are there in their true relative proportions. Men seem to have taken the human body as the basic standard of measure. By handling, we find something of the size of our body and have taken our different measures from it, as is indicated by the names which they bear. A cubit is the distance from the elbow to the tip of the middle finger; we speak of a "hair's-breadth," of a "span-long," the distance from end of the thumb to end of little finger extended; of a "hand," the measure of the fist clinched, the same as a "palm;" of a "finger's breadth," a "finger's length;" of a "foot," of a "pace," or "stride." From this we have a mile, which is over five thousand feet in length. The French have taken the Globe of the Earth as a base; their "Metre" being the ten millionth of a terrestrial meridian. Astronomers use the velocity

Standard of Measure Needed

of light to measure the distances of the stars, some of which are so far distant, that they are hundreds of "light years" away in the depths of space. But to form any idea of the Metre and Light-measure, we must fall back upon the measure of the human body.

Knowing the true relative proportion of the things of the world by sight, knowing the body by handling, with measures taken from it we measure the things around us. Thus we learn their size as compared with the size of the human body; and say of a tree, that it is forty, or a hundred feet high; of the mountains that they are thousands of feet in elevation; of oceans and continents that they are thousands of miles in length and breadth. With this knowledge of the measured size of the world, when we conceive of it as we see it in its true relative proportions on the retina, our conception embraces this additional real characteristic of it. In these days of modern Astronomical Science, we see immeasurably deeper in the realms of Space than the ancients did, and, by reason of geographical exploration and discovery, our conception of the world is much more enlarged than theirs was, though their sight was as keen, and even more keen than ours.

Yet again, by actual measurement we learn the measured distance of visible objects from one another, and from our own persons and eyes, and conjoin this knowledge with that obtained by vision itself as we form our conception of visible things. Were we entirely dependent upon sight, our conception of the world would be of the most limited and unsatisfactory character, as much so as would our conception of Europe, if we thought of it as a mere map printed on paper.

It is by the Might of Intellectual Power, combining all our knowledge obtained by the different organs of perception and wrought upon by thought, that by vision

Answer to the Two Questions

we look far off beyond us and behold the world, as it *really is* in its sun-given beauty of every tint and color, its vast extent, its soul inspiring sublimity.

Thus the *two questions are answered*. We see distant things because *they come* to us, enter the eye and rest upon the retina; and seeing them in their relative proportions and distances, we conceive of them in their actual size and distance from one another and from us, which we know they have as compared with measures derived from the human body.

Visual Perception of Distances.

The question has often been asked, is "Visual Perception of Distances" original, or acquired? Sir William Hamilton says, that formerly it was supposed to depend upon an original law of our constitution, but that in Berkeley's "New Theory of Vision," published in 1709, "it appears most clearly demonstrated that our whole information on this subject is acquired by experience and association"—that this conclusion is supported by the greatest mistakes into which we fall, with respect to the distances of objects, when we form our judgment solely from the visible impression, and that it is confirmed by the case of Cheselden; the patient thought all objects touched the eye. Again "The whole question is thrown into doubt by the analogy of the lower animals. If in man the perception of distances be not original, but acquired, the perception of distances must be also acquired by them. But this is not the case in regard to animals; this confirms the reasoning of those who would explain the perception of distance in man as an original, and not as an acquired knowledge," Lect. 28.

Dr. McCosh says "But while the perception of distance is not an original endowment of sight, it can be acquired."

Not an Acquired Perception

A distinction is thus made between *original* and *acquired* perception. This, however, is a distinction which is not true, except in a very loose, popular, unscientific, sense of the words. From the presentation, which we have given of perception by sight, it is evident that we have no acquired perceptions. The word *original* also is unfortunate, being ambiguous. Sir William Hamilton says, that before Berkeley the perception of distance was supposed to depend upon an *original law of our constitution*. This is obscure and mystic, and is certainly to be rejected. The term "original" if used at all, which it need not be, must be taken in the sense, that the visual perception of distances belongs, not to a law of our constitution, but to visual perception itself; is included in it.

Scientifically, the distinction should not be made. The simple statement is, that visual perception of distance is the careful observation and interpretation of that which we see. This is evidently true from the proper consideration of "Sight," as it has been presented.

The *external reality* enters the eye and is placed upon the retina, pictured there exactly as it is at a distance. That which we *perceive* is this picture; and by no possibility can we acquire the power of *perceiving* any thing more than that which is within it. As sight is an intellectual act, we *see* only as we take knowledge of and understand the realities, which are presented by the organ of sight. Hence it is, that sight differs greatly in different individuals, and in the individual himself. Men may increase their visual power by becoming more observant, and by penetrating the deeper into the true significance of the things which they observe.

Many instances might be given illustrative of this.

Multitudes go through the world without observation and without asking themselves the meaning of what they

Insight into the Meanings of Things

see. Others are very observant and penetrating. Some have carefully trained themselves in these respects. They become quick in seeing, retentive in remembering and sharp of insight into the significance of things.

It is said of a certain legerdemainist, that he trained himself by rapidly walking past a shop window, glancing within it, and then trying to recall what he had seen. At first, he could tell of only a few things therein; finally by such rapid glance he saw and remembered many, if not all. Sailors and woodsmen see and know many things, to which others seem altogether blind. Our Indians will thread their way through dense forests, where ordinary men would lose themselves. It is by noticing things to which others give no attention, and not because they have acquired a new perception. Dr. McCosh refers to the well known fact, that the Indians will see a trail, hardly visible to others, and looking upon it will know how many men have passed over it, in what direction they went and how long a time has elapsed since they were there; yet they *see* no more than others might. Noted detectives have become wonderfully expert in observing and interpreting that, to which others give no heed. A watch was given to one, who thereby read the character, and experience of the owner, to the surprise of the man's friend at the truthful presentation. He described him, as a man of some social position, who at times was somewhat prosperous, and at other times reduced, because he drank. The explanation he gave was, the social position was revealed by the character of the watch: it was such as an ordinary man would not have and use; pawnbrokers' marks, more, or less repeatedly made, showed the difficulties in which the man was at times, and that he redeemed the watch as frequently showed returned prosperity; the scratches, around the key-hole, showed the uncertain trembling

Perspective in Paintings and Vision

handling of one who drank. Other most striking instances might we given of the expertness of detectives.

Another illustration is found in "reading." In *learning* to read we do not *acquire any new* power of *perception*. One, who cannot read, sees just as distinctly as readers do, the printed letters and words, but they do not understand their significance; just as in regard to hearing, telegraph operators, of the Morse system, can read the message from the clicking of the instrument, though they hear no more than others do. They interpret the significance of the sounds.

All these instances clearly show, that in Vision everything depends upon intelligent observation and interpretation; that in acquiring superior Vision, we do not acquire new perception, but only make a better use of that, which we already have.

It is in this way, that we are to understand our perception of Visual distance.

It is in regard to "Vision" as it is in regard to paintings. The correspondence between the two is remarkably close. They are both flat, colored, pictures and are according to the law of perspective. In a good painting of a landscape, we can look along a far-reaching road, or down through the vista of long lines of trees; or, in another painting, we may look through the open door of a Gothic cathedral and distinctly see all along the main aisle, with its rows of pillars, through to the stained glass window, at the other far distant eastern extremity of the building. With these perspectives in painting we are very familiar. *They are in the paintings and we see them there* by our ordinary power of sight. We are not deceived, for such is the *real character* of these paintings and we *see it*. If the painters had no knowledge of perspective and no skill in painting it, the pictures would not have it and we could not see it. Having before us

We see Distance in Paintings

paintings, true to perspective, we look through long vistas to far-off distances, because we know the significance of that, which we actually see. If there be persons, who, having never seen a drawing, or painting, fail to see the perspective at the first glance, it is a mere failure of interpretation, from which they almost immediately recover; the painting readily bursts upon them, suddenly, in its true character.

The indisputable fact is, that in true perspective paintings *we see* distances. All things occupy their relative positions, at various distances from one another. Some objects of the landscape are on the extreme right; others far off on the extreme left; others are at various intermediate distances between these; we have the near foreground; the middle-distance and the far-off background; we have rocks and trees immediately at hand, and the gable ends, the roofs and spires of a distant village, and beyond it the mountains, lifting their peaks far up above the plain. It must be noted, however, that all these are only relative, not actual *measured* distances, no more than the sizes are actual sizes; the actual distances must be measured to be known, as in the case of the map of Europe before mentioned. The painting gives no indication of *measured* distance, we do not see it therein, except as we form our conception of this from knowledge otherwise obtained.

What has thus been said of paintings is true of the picture on the retina. Let it be of the same landscape and cathedral, of which the paintings are pictures. We, as in the paintings, look along the far-reaching road; and down through the vistas of long lines of trees; and through the open door of the cathedral, along the vista of its columned aisle, to the far off stained-glass window. These perspectives are in the pictures, on the retina, and we see them there by ordinary power of sight.

and in the Same Way in Vision

Such is the *real character* of the pictures, and *we see it*. As in the painting, if the perspectives were not there, we could not see them. Having on the retina the picture, true to perspective, we look through long vistas, because we know the significance of that, which we actually see; if we do not, it is a mere failure of interpretation of that which we see.

Here again, the indisputable fact is, that in the true perspective picture on the retina, *we see distances*. In it, as truly as in the paintings, all things occupy their relative positions, at various distances from one another. Some objects of the landscape are on the extreme right; others far off on the extreme left; others, again, at various intermediate distances between these; we have the near foreground; the middle-distance; the far-off background; we have rocks and trees immediately at hand and the gable ends and roofs and spires of the distant village; and beyond it, the mountains, lifting their peaks far up above the plain. All these distances we distinctly and unmistakably see.

But here, again, it must be noted, that *these distances, which we see* are relative, not measured distances. We see that the objects are at various distances from one another and back from the foreground, but we do not see the measure of these, except as we form our conception of them, from knowledge otherwise obtained. In other words, we must have a standard of measurement, with which to compare them. This, however, is not *perception*; it is not *seeing*; it is comparison. We see the *distances themselves*, and, having in our own mind some standard, a foot, a yard, a mile, we compare them in thought with these measures. Or we may compare the seen distances with one another. Thus, we might compare the distance of a rock, in the foreground, from a tree on the right, with its distance from one on the

Mistakes All in Comparisons

left, and say that they are the same, or different to such an extent, as the case might be.

In *these comparisons*, there is room for innumerable mistakes, while our *perceptions* of the distances themselves are perfectly true. The comparisons are, often, little better than guess-work. We see, as we take a walk, a house at the far end of a road, and we are not mistaken; it is there away off, in the distance; but we *guess* that it is about a mile distant. We enter a strange room, and we guess that the distances of the walls from one another are fifteen and twenty feet; which guess may be inaccurate. We see a stick lying on the ground, and we guess that it is a yard in length; and again we may be in error. We *see* a mountain *in the far distance*, this is perfectly true; but we may be wrong, when we suppose that it is twenty miles away; it may be twice that distance, or more. Such mistakes, of a constant occurrence, prove nothing against our visual perception of distances, as not acquired, and as infallible; as all our true perceptions are.

Thus, it is evidently true 1. That we *see* distances. 2. That it is by *ordinary vision*. 3. That it is by reason of the *perspective which is in* the things seen. We cannot see the different distances of things, in the same line directly in front of us, because they present no perspective. By perspective is meant lines, running back from the foreground, and converging towards a point in the distance. The perspective in itself is often of the most subtle character, and almost impossible to Art. The photograph will reproduce and *show* it to us plainly, where Art fails. 4. That the distances, *which we see are real*, but relative, not measured; the latter are comparisons with a standard. 5. That hence we must understand the perspective and must have a standard of measurement. 6. That there is no need, nor possibility of

Perspective Starts into View

acquired, new perceptions; these are only the better use of what we already have. 7. That all mistakes are in the comparisons, not in the perceptions; these are infallible.

The moment we are capable of distinct vision, we see every thing that can be seen. The only acquisition possible is that of greater attention to and better interpretation of the realities seen. For this the perception by touch and the locomotive automobile powers come to our aid. We see an object, reach forth our hand to take it and feel for it till we find it, or if need be, walk till we come to it. With this apprehension of the extra-organic distance of things seen, immediately as by the touch of a magician's wand the perspective character of the picture on the retina starts into view, we at once understand its significance. We now see it aright and look upon the real distances, which it presents.

An illustration may be had in the "Puzzle Pictures," in which we are required to find some object, as for example a man, which does not immediately appear. Often we may scrutinize the picture by the hour unsuccessfully, when suddenly the figure is seen so plainly that we cannot help seeing it and wonder why we could not see it before. We did not look at the picture aright.

So the moment we look at the picture on the retina aright, as an infant may do, we see the relative distances of objects from one another, and from ourselves, as some part of the body is almost at all times included within the vision. And with the body, as a standard of measure, we compare the distances seen with it, and obtain some knowledge of their measurement.

All we have thus presented is in accord with the cases of the blind who have obtained sight. Finding by touch that visible, tangible objects were not close to their eyes, as they seemed to be at first, they interpreted the vision aright and *saw* the distances presented.

Agrees with Vision in Young Animals

It is in accord also with the visual perception of distances, by the young of the lower animals, antecedent to all experience. The young chickens immediately upon leaving the shell seem, as it has been expressed "to understand this language of vision, as well as they ever do afterwards," while the human infant seems incapable of this.

There is a most striking contrast between the infant and the young chicks. The former is immature in mind and body; he seems not to notice anything, can neither stand nor walk, he is the perfection of helplessness. The newly-hatched chicks are wonderfully matured. Mentally, they seem as far advanced as they ever become. They know the hen, as their guide, and protector; they distinguish her varied calls, to partake of the food, to run to her as a refuge from danger, or to quietly repose beneath her wings for rest. They apprehend danger and are all alert to escape from it; they take notice of everything around them; they distinguish and act upon the direction of sound; they perceive the difference between food and that which is not food; they know that they must scratch and peck and strive for a living, and are ever active in so doing. Bodily they are far advanced also; can stand, walk and run with rapidity, in any direction, with confidence. With this advanced mental and physical development, as sight is an intellectual act, they interpret vision aright from the very outset. Seeing a particle of food, hunger prompts them to take it; they peck at it and run to it, not knowing how far, or near it may be, and *in a moment*, the true character of visual distance bursts upon them.

Moreover, it may be suggested that there is possible exaggeration in regard to the comparative ability of the chicks and the inability of the infant. An infant, only a month old, will reach out his hand to take things held

Other Presentations at Fault

up before him. He thus seems to see distances, *as soon as he takes notice of anything*, and may not be so far inferior to the chick, as is supposed.

In both cases it is simply a question of mental and bodily maturity.

Our presentation establishes the reality of actual, visual perception of real distances. Other presentations give no explanation of it and make it impossible. By excluding it from what they call "original," they exclude it from all true perception. They make it an estimate and a judgment, founded on association.

Visual perception is reduced to what might be called *inferential* vision; that is an inference founded upon something else, which we do see.

Still further, the contrast between these presentations and that, which we have given, is very striking. The former leave the distant objects and their distances *far off*, where they must be invisible; whereas ours brings the objective reality, the whole distant, visible phenomenon with all its characteristics of color, figures, motions, relative sizes, proportions, positions, *distances*, *perspectives*, down to the minutest detail *into the eye*, and places all these upon the retina, where, and where alone, we *directly cognize*, that is *see* them as they actually are themselves. We *cognize the real distances as truly and in the same way*, as we cognize the other visible, characteristics just named.

The Inverted Picture.

That which has proved a veritable Puzzle, is the problem of the Inverted Picture upon the Retina. The explanations, which have been given, are of the most unsatisfactory character.

If, however, we accept as true what has been said of Vision, the problem resolves itself in a most simple,

Inverted Picture Explained

plain and beautiful manner. The Picture upon the Retina includes within itself the *entire Vision*, without the least possible exception, not even that of our own person, or any part of our body, as a hand, or a motion of the finger. There is nothing, therefore, with which the picture may be compared to determine its position. In cognizing it, we have our *knowledge* of the visible world, and "knowledge" has no position up, or down. The *knowledge*, obtained from vision, has no more position vertical, or other, than knowledge from vivid, word painting would have.

In seeing the Picture on the Retina, we see all things in their true relations to one another, and it is a matter of perfect indifference how our entire visible world, ourselves included within it, stands related to that which lies outside of it, and of which we have no knowledge whatever. We have no means of telling how it stands related to this, nor how often and to what degree the relative positions may change.

An *illustration* and *proof* of this is readily given. We may suppose ourselves, with many others, to be walking within a great Gothic Cathedral, the doors of which are shut, and from the windows of which it is impossible for us to look. Shut within the Cathedral, could it be moved, without the least perceptible jar, or vibration, and could ourselves and others, and all things, maintain our relative positions to one another, and to the building, we would be ignorant of any and every change of position, which the Cathedral might have. It might be laid on its side upon the ground, or stood up perpendicularly upon either end, or completely inverted, foundations and floor lifted heavenward, and roof and spires directed downward. We, and the whole company of those within, would still promanade the spacious aisles and look upward to the vaulted ceiling over our heads.

Illustrated by a Cathedral

This would be regarded as an absurd extravaganza, were it not an actual fact. The Cathedral is thus laid on its side, or stood on end, and its roof and spires are turned downward every twelve hours, while we know it not. Should we, and others, enter the Cathedral at noon and remain till sunset, the building at that time would be lying on its side, at right angles to its position at noon-day, or it would be on end, as the case may be. And should we remain till midnight, its roof and spires would then point in the opposite direction to that in which they pointed at noon, while we would have our heads where our feet were and, looking at the vaulted ceiling, our eyes would be directed as they were when at mid-day we looked upon the tessellated pavement.

Of this we would be profoundly ignorant. We have discovered the fact through our knowledge of the shape and rotation of our Earth, and by comparing the position of the Building with the Sun, or with some star, or constellation of the heavens.

In this illustration, we have the exact presentation and explanation of our Vision of the Picture on the Retina, and this leaves nothing more to be desired. The explanation is self-evidently true and perfectly satisfactory.

An explanation, which has been given, that the inverted picture is righted because we refer each point of it along the visual ray to the point from which it comes, involves an assumption, which is not true. It assumes that the Soul stands behind the picture, and, projecting it beyond through the lens of the eye, looks at it, as at a distant object. This is not the case. We look not at and through the lens of the eye, but upon the retina, as the astronomer looks, not upward and through the heaven-directed end of the *reflecting* telescope, but, by an opening, down upon the upturned face of the mirror, at the lower extremity within.

“Righting” of Image not Needed

Seeing is an intellectual act, and the Soul being omnipresent at the picture on the retina, neither especially in front of, nor behind it, but omnipresent with it at its every part, cognizes it, simply takes knowledge of it, as it is *there present*, and with this knowledge it forms its conception of the world.

In the Camera, the look of the photographer is upon the picture on the glass near his eye. He makes no attempt to project the picture and look at it, as at a distance beyond the camera. He would destroy the vision, should he do so. Thus it is with the picture on the retina; the look of the Soul is *upon it as it is thereon*. The Soul no more *projects* the picture, than the photographer projects that on the glass, at which he looks. Our off-look upon the great world beyond and around us, is simply our knowledge of it as it is on the Retina, conceived of in the exalted character, which we know it has, from the additional knowledge of it otherwise obtained.

But still further, the explanation is invalid, because it is not in accord with the laws of optics. If we look through a lens, which inverts the image, we cannot right it by any possible projection of it. The image is inverted, and so it remains as we look at it. Moreover, as above pointed out, there is neither need, nor possibility of “righting” the so-called inverted image. Practically, and so far, as the whole visible world is concerned, there is no inversion; no more than there is the turning up-side-down of our world, every twelve hours. We regard it as right-side-up at all times, and would be at a loss if compelled to determine, whether the mid-day, or the mid-night position were the true one.

The Reversal of the Picture

The Reversal of the Picture on the Retina is ex-

Illustrations

Washington Monument

plained in the same way. As all things visible occupy their true relative positions unchanged, as all including ourselves, are reversed alike; and, as there is nothing, by comparison with which the reversal is revealed, we cannot know, that any reversal has taken place; just as if we were in the Cathedral, completely shut off from all outside, we could not tell in what direction it might turn around, if it did so without noise and without the least vibration; or if, during a dark night, far out at sea, we were in a bright lighted room, below deck on ship-board, we could not tell what course the ship was taking, or how greatly it might change its course. I have been at night in a "sleeping-car," when, having lost my bearings as I entered, I had the impression that the car was moving in the direction opposite to that in which it was really going.

All these cases clearly show, that we cannot tell, that there is any want of adjustment between the "vision" and that which is outside of it; and also that there is no difficulty to be overcome.

Binocular Vision

Another Problem, which has given trouble, and the solution of which has not been satisfactory, is that of Binocular Vision. How is it that seeing with two eyes, we have but one vision?

The true explanation is found in the presentation of Vision, which we have given. "Seeing" being an intellectual act, and "vision" being our knowledge of the thing seen, as pictured on the Retina, when, and in so far as the two pictures are the same, in cognizing them, the *knowledge* which we thus obtain and the *conception*, which we form from it, are one, not double. If two persons should give me exactly the same description in words, of the Washington Monument, on the bank of

Seen as One because the Same

the Potomac, so alike that I perceived no difference between them, my conception of that monument from the two descriptions, would be of the one monumental shaft. I could not think of it otherwise. But, if the two descriptions differed from one another, I would have two different conceptions in my mind.

In like manner, if by the muscles, the inclination of the axes and the focusing, etc., of the eyes, the two pictures on the Retina be so much the same, that I perceive no difference between them, my knowledge and conception must be of the one thing thus presented. But, if the two pictures differ from one another, my conception is double. I have two different pictures which I see.

An example of this may be had in an experiment, which has been made. Hold up the little finger, at about half arm's length from and mid-way between the eyes. Direct the eyes to an object beyond, as a Vase on a Mantle, the little finger will be seen as two, one on each side of the distant object. The reason is because the pictures, on the retinae, differ from one another; in the one, the finger is on one side of the distant object, and in the other, it is on the other side. This is because the eyes, being apart from one another, the rays of light fall in this way upon the retinae, and we see it, when the eyes are focused upon the distant object.

Again if, when looking at an object which we conceive of as single, the two pictures being the same, we press the ball of one eye with the finger, the vision becomes double, because the two pictures are thus made to differ from one another. The rays of light, though coming from the same object, strike the two retinae at different angles and at different places, and we, *observing the difference*, see the pictures as two, somewhat separated from one another.

“Sameness or Not” how Determined

This is the true explanation, but it cannot be appreciated unless we understand how it is possible for us to know, that the picture on one retina occupies on it a different position from that, which the other picture has on the other retina. It would seem that there is nothing to indicate this, as it is the *entire* picture, which changes its position as the ball of the eye is pressed, and there seems, therefore, to be nothing within the eye to show any change; and we cannot compare the positions of the two pictures with one another, as they are two independent pictures separated from one another, as much so as a picture in one room is from one in another.

It is manifest that there must be something within the eyes themselves, which enables us to localize the pictures in their respective places on the two retinæ. Between the relative positions of two pictures in two rooms we can distinguish, because we have in each room that which determines the positions; for example the picture in one room may be near the ceiling, that in the other near the floor; or the one may be hung straight, and the other in a slanting position, in reference to the lines of floor and ceiling. But in the dark interior of the eye there seems to be nothing, to which the positions of the pictures may be referred and determined. This, however, is not the case in reality.

There is what is called the “yellow spot,” the “*foramen centrale*,” where the vision is the most vivid. The characteristic of this spot is that it has not a definite boundary, but shades off insensibly into indistinctness and into total obscurity. It may be conceived of as a central point on the retina, from and around which the vividness of vision declines in every direction to nothing. Here it is that we have that, to which the picture may be referred and its position on the retina determined. In all ordinary vision the centre of the picture

Central Point of Retina

is at the centre of the "yellow spot," but if its position be changed, it moves in some direction from that central point, and towards the outlying circles of indistinctness and obscurity; and, as in every picture there is a clearly perceived right and left-hand side, the movement to the right and left from the central point is manifest also; the same thing is true of motion up and down.

The experiment of pressing the eye-ball clearly shows this to be the case. As by the finger-pressure we thus change the position of the picture, it will be noticed that the vividness of the vision of it diminishes; and, if the eye-ball be moved far enough, the picture will disappear entirely. Moreover, the change of position is perceptible when the other eye is shut, showing that there is no real need of comparing the two pictures in order to perceive the change of position, but that in each eye we localize the picture on the retina.

The same truth is revealed by the slow moving of a glowing spark, looked at in perfect darkness, when naught but it is visible. With nothing within, nor without the eye to which to refer the spark and manifest its movement, we see it move across the retina, because of the central point of the "yellow spot." The spark issues from obscurity on one side of it, becomes more and more distinct, passes by it and enters into obscurity again on the other hand, or, keeping within the field of vision, circles and zigzags around in reference to its centre and outlying boundaries.

That, when the pictures are dissimilar, we see double is plainly shown by a simple experiment. Place a thin board between the eyes, so that the objects, seen by the one eye, cannot be seen by the other. We will see two different pictures, one by the one eye, and the other by the other eye. The experiment will be somewhat of a strain on the eyes, showing that the vision is different

Double Vision shown by Experiment

from our usual and normal binocular vision. It will appear that it requires effort to see the two pictures, and we will find ourselves looking at them alternatively, now looking at the one, with one eye, and then at the other, with the other eye. Having two pictures, at which to look, our attention is somewhat distracted and we find a little difficulty in attending to both at once.

It has been said, that though we do not notice it, till by experiment we discover the fact, we usually look with only one eye at a time, though both eyes are open. This is much exaggerated and must be taken with great allowance. So far, however, as this is the case, the reason may be found in that, which we have just mentioned. We really have, not altogether, but in a measure, two different pictures before us on the retinae, and as we cannot well attend to them both at once we with rapidity of change look at them alternatively, now at the right hand one with the right eye, and then at the left hand one with the left eye; or accomplish the same thing by directing the two eyes rapidly from side to side. This constant "play of the eyes" is one of their noticeable and interesting characteristics, as we watch the eyes of another person; it is wonderfully beautiful.

Again it is to be noted that our vision, as just intimated, is never, except in certain special instances, altogether single. The two pictures are in some respects dissimilar, and hence are seen double so far as that is the case. Thus the vision of the right eye is extended further to the right hand than is that of the left eye, and the vision of the left eye is extended further to the left hand. These portions of the pictures, being thus different from one another, are seen as two, while the other parts are seen as one, being the same, except so far as objects, with fulness of form, are seen more on the right side by the one eye, and more on the left by the other.

A Difficulty Explained

Here, again, we see double, though these objects be directly in front of us, because the pictures differ in this respect; and it is because we have this double vision of objects, that we are the better able to see their shapes *in relief*.

A fact has been mentioned, which seems to be inconsistent with our explanation of binocular vision.

Thus Dr. W. B. Carpenter says, that should the conditions, on account of which the axes of the two eyes do not converge in the object looked at, become permanent, as in squinting, the vision *after a time* becomes single again, notwithstanding the pictures are formed on parts of the retinae, which do not correspond. Further if the muscular irregularity be rectified by surgical means, so that the axes of the two eyes can be again brought into convergence in the object looked at, *double vision recurs for a time*, although the images are now formed on the original corresponding points."

It seems from this statement, that in certain cases there is single vision when the pictures are dissimilar, and double vision for a time when the pictures are the same, while according to our presentation of binocular vision, the dissimilar should give double vision, and the similar should give single vision.

Two explanations of the facts mentioned, may be given, founded upon what has already been said.

In the first place. In the experiment with a thin board placed between the eyes, hiding the picture seen by one eye, from that seen by the other, it was noted that, because of two pictures being presented, we found it difficult to attend to, or look at both at once, and, in reality, were prompted to look first with one eye and then with the other. While looking with the one eye at the picture presented to it, we could disregard the other picture, and the vision would be single.

Single Vision in Squinting

Thus when, as in squinting, there is an abiding displacement of the pictures, and hence a double vision, the individual falls into the habit of looking with one eye only, heedless of the vision by the other eye. This is in accord with the alleged fact, which is in some measure, but by no means altogether, the case, that in normal vision we look habitually with only one eye. Moreover, we have also noted, that when the pictures do not rest upon corresponding places on the retinae, the displaced one is less distinct than the other, and if the displacement be great enough, it disappears entirely. This indistinctness of one of the pictures would greatly tend to prompt the individual with a squint to give heed with one eye alone, and thus have single vision; and in some cases, possibly, the squint may be so great that one picture disappears entirely, when the *same object* is looked at *with both eyes*, though each eye would have clearness of vision, when used separately.

In the *second* place. It is a well known fact that the organs of our body become atrophied by reason of want of use, and to a greater, or less degree according to the degree in which they are not used; and that they become extraordinarily acute, or sensitive when unusual work is thrown upon them. The familiar illustration of this is the marvellous acuteness of touch in the blind, and of hearing on the part of those, who, like our Indians, live in the forests and on the plains, and depend upon hearing as their guide.

In accordance with this, there may readily be a change in the retina of the eye, all the more so because of its extreme delicacy. Moreover, that change is possible we know from actual facts of experience. The vividness of vision varies with the varying health of the individual, and it is as true of sight as it is of hearing and touch that by special effort and training, its acuteness or

Second Explanation, Namely

sensitiveness may be greatly increased. It is also a well known fact, that the retina loses its sensitiveness from want of use. A prisoner long confined in a dark cell becomes partially, or totally blind for a time, and even permanently so. He may sometimes recover sight under the kindly influences of light, if judiciously and gradually applied. Moreover, we may be blinded for a greater or less length of time by excess of light; for example, if we look directly at the unclouded sun, our vision is seriously impaired, and is only gradually restored; the frequent and long continued exposure of the eyes to such light would be hazardous in the extreme.

We have positive knowledge, therefore, that the vividness of vision changes with use and disuse.

Hence it is, that in cases where the picture of one eye is displaced permanently, the centre of the spot of most vivid vision may change in like manner. The part of the Retina, which normally is most sensitive, becomes less so from want of use; and the part, which is used more than in the normal degree, increases in its sensitiveness, and becomes the centre of the most distinct vision; or in other words, the "yellow-spot," with its centre shifts a little to one side; the actual distance necessary, being however, of extreme minuteness; a change which might most readily occur from habitual use.

With this change thus effected, the vision of the two eyes becomes single, because in both eyes the pictures have the same position in regard to the centre and boundaries of the "yellow-spot," by reference to which, as we have pointed out, the position is determined.

Hence, also, when the irregularity of the eyes is rectified, by surgical means, double vision recurs for a time, although the pictures are now formed upon the original corresponding points of the retinae, because the "yellow-spot" of the one eye, shifted by habitual use, does not

The Centre of Retina may Change

now correspond with that of the other eye, and the position of the picture as determined by it is different. The double vision, however, does not continue, because in the eye rectified by surgical means the "yellow-spot" in time changes back to its original position, by reason of the change in the habitual use of the eye, which has now become normal. When this is effected the vision is single again.

With the two possible explanations, which we have given of the facts in question, the difficulty in regard to them is entirely removed; and that such explanation can be given is a further confirmation of the truth of our presentation of Vision.

By way of hypothesis, it might be added, to make the second explanation the more clear, that though we have spoken of the change as taking place in one eye only, this is not necessarily the case, *Theoretically*, the same effect might be produced by the shifting of the "yellow-spot" in both eyes, in opposite directions, but only to one-half the distance required if the change be confined to one eye. This would make it less difficult for the change to take place. The individual with a squint in such case might have single vision, because of the habit of looking at an object, not "directly with one eye and aside by the other," but by looking at it aside by both eyes, the object being intermediate between the two lines of vision. This would give habitual use to corresponding parts of both retinæ, and cause the "yellow-spot" to shift in both accordingly, and thus give single vision. And should the eyes be rectified by surgical means, double vision would recur again for a time.

Apparent Deceptions of Perception.

The apparent Deceptions of Perception are varied and numerous. They have been used to establish Idealism

Apparent Deceptions

and to destroy the doctrine of Intuitive Perception. It is manifestly necessary to show that they are only apparent, not real; for an essential part of Intuition is its Infallibility. If our perceptions are not infallible, they cannot be intuitive, as Intuition is the immediate cognition of realities. In the first place we must distinctly understand what is meant by the claim of Infallibility for our external perceptions. It will be remembered that our consideration is at present confined to Vision.

That which is immediately perceived by sight is the Picture on the Retina. This is the objective reality cognized, and it is *this Cognition* which is infallibly true.

With this distinctly apprehended, it may readily be shown that all the alleged deceptions are only apparent. This may be done to a great advantage, if we discriminate between them and arrange them in different classes as follows:

I. Class. Those which are *Real Phenomena* depicted or placed upon the Retina. It must be remembered, as we have pointed out, that a "phenomenon" is not a mere appearance; it is an "actual effect produced," a "manifested reality."

These are no deceptions, though often regarded as such. This clearly appears from the explanations which we give of the following instances.

1. When a straight stick is partly placed under water, it is seen as bent. This is a true phenomenon, or effect produced by the laws of light; the rays of light are refracted by the water. This effect is *real* and is placed on the Retina and cognized in its true character. If we did not thus cognize it, our perception would be false as to the fact, and we would be ignorant of one of the things of the material world.

2. When the Sun and the Moon are seen near the horizon, the diameter of their disks is greatly augmented

I. Class Real Phenomena

above that which they have when high in the heavens. This also is an actual phenomenon or effect produced by the laws of light, and as such placed on the Retina and there *correctly cognized*. The enlargement is due to the different states of the atmosphere through which the Sun and the Moon are seen in the two positions. If we did not see this, we would be ignorant of this characteristic, or thing of the material world.

The *magnified* disks are, as such, thrown upon the Retina just as they are thrown upon the plate of the Camera and there photographed. There is no more error in one case than in the other. Moreover, such is the actual size of the Sun and Moon that the lines of vision, which they subtend, include within them near by objects, as houses or trees in whole or in part, and as thus presented their true size is given in reference to these objects. This is not a mere inference, or judgment as to size, but an actual phenomenon, or effect according to the laws of light, and is depicted equally upon the retina and the photographic plate; a mere inference, or judgment on our part could not be photographed.

When the Sun and Moon are high in the heavens, their actual size is diminished because, owing to the purity of the atmosphere, the angle of the lines of vision is greatly reduced. The *fact* of the smaller size is depicted on the Retina, and photographed by the Camera; it is a reality.

The explanation which is often given, that the Sun and Moon when near the horizon are *supposed* by us to be larger because we look at them in immediate comparison with trees, etc., the size of which we know, is not correct, because it is not in accord with facts. As already pointed out, the enlarged size is a reality which is photographed by the Camera, which would be impossible if it were a *supposition* of our own. The fact is that the

Enlargements of Sun, Moon, etc.

Sun and Moon are larger when they are near the horizon than when they are higher in the heavens, whether we know the reason or not. The most ignorant *see the fact* as plainly as others.

That the visible size depends upon the state of the atmosphere appears from the fact, that the Sun and Moon, near the horizon, are at times magnified more than at other times, and often when seen higher in the heavens, through a mist, they are enlarged there also. The same thing appears from the enlarged size of other objects seen through the mist. Men are sometimes thus magnified into colossal proportions, especially amid mountain scenery.

3. The enlargement of men and other objects seen through a mist is no illusion. Somewhat similar to this are the Aerial Images of objects greatly increased in size, as the "Spectre of Brocken." "Of this the peasants in the neighborhood of the Hartz Mountains formerly stood in awe. It is the figure of a man observed to walk the clouds over the ridge at sunrise. The apparition has been resolved into an exaggerated reflection, which makes the traveller's shadow pictured upon the clouds, appear a colossal figure of immense dimensions." Such Aerial Images are no illusions. They are true phenomena depicted on the Retina, and on the plate of the Camera. An illusion cannot be photographed. The photograph is proof of reality. These phenomena are one of the real, attractive, visible, wonders of the world.

4. Mock Suns, or Parhelia. Here again we have real phenomena of which, as depicted on the Retina, we have accurate and true perception.

5. Paintings, and Mirror Reflections are no deceptions, These are *objective realities* and we see them as they truly are. Here, again, the reliable Camera gives the proof. Paintings and Reflections are upon both the

Rising and Setting of Sun and Moon

photographic plate and the Retina in their real character. See also under Class II, No. 4.

6. Motion of objects seen through the window of a moving car. This is often mentioned as a most decided deception. Such, however, is not the case, as far as true perception is concerned. All motion is relative. The car and the objects seen from the window are moving past one another; it matters not *how* the motion is produced. The effect is the same whether the car is in motion or the objects, or both. It is the *motion of these past one another* that is placed on the Retina and there correctly cognized. Which is the moving one *is not depicted*, unless an additional object is given on the Retina, which being known to be stationary, shows the motion of the car in reference to it.

7. The same thing is true of the old form of "Panorama Exhibition." The whole darkened room filled with the spectators seemed to be moving past the unbroken line of scenery. It was the illuminated painting which moved, unrolling from one roller and winding up on another, both hidden from view. The real motion of scenery and room past one another was correctly perceived.

The Rising and Setting of Sun and Moon and of the Constellations, and the motion of the "Great Bear," as it swings diurnally around the pole. These are true phenomena correctly perceived; great and attractive characteristics of the heavens.

The rising and the setting of the Sun and Moon are as true now as they ever were, or were supposed to be; and the expression is literally correct and appropriate. The correctness has not been impaired by scientific discovery. The scientific and popular sentiments are equally true. As a real fact the Sun and Moon arise, as we stand looking southward, on our left hand behind

Kinetoscope

certain trees and houses on the eastern horizon, advance higher till overhead at Noon, and then descend till they sink on our right hand behind other trees and houses on the western horizon, All this is correctly seen. Scientists still speak of the *rising, southing and setting* of Sun and Moon and tell the hour, minute, second and half second when these occur, for every day throughout the year. That which we correctly see and which is accurately calculated by astronomers is the movement of these bodies and the surface of the earth past one another. The effect is the same by whatever mechanical arrangement and forces it may be produced.

8. The glowing end of a match, or the spark at the end of a slowly burning string forming a circle, or other figures by rapid movement. The circle, or other figures, thus formed is an objective reality. By reason of the retention of light upon the Retina, these figures are actually depicted on it and truly cognized as they actually are. The bright color, thrown on the Retina by the moving spark, remains on each successive place till the spark returns and renews it, thus forming an unbroken line of color. The same figures, thrown on the sensitive plate of the Camera, are there with proper time exposure photographed.

9. The same thing is true of the Kinetoscope and similar instruments with moving figures. The pictures and the motions are on the Retina and we perceive them truly.

10. Stereoscopic Pictures. The Stereoscope throws the same pictures on the Retina that real objects would throw on it, and in so far as this is the case the *perception*, which is *that of the pictures on the Retina*, is equally true in both cases. How the pictures are produced is another question determined in various ways.

As a matter of fact, the distant external object, which

Colors; Optical Effects

we see, is a double *perspective* photograph; one picture is seen with one eye and the other with the other eye. Our vision of these two is *single* so far as the photographs are the same and *double* where they differ. We see the bold relief, because this is *in* the double perspective photograph, as long distances, vistas and reliefs are *in* perspective paintings and *in* Nature. In all these cases the vision is equally true. In the Stereoscope the perspective is so subtle that the photograph seizes it where the artist fails.

11. Color Blindness. There is no deceptive perception where this prevails. Owing to various circumstances, the different colors are not, as a fact, thrown on the Retina and consequently they are not perceived.

12. The Color of a landscape looked at through colored glasses, as red, or yellow, which make all things of these colors. The simple fact is that the light, which enters the eye and falls upon the Retina, has these colors which are correctly seen.

13. The Vivid Changes of Complementary Colors, seen after the eyes are shut. This is an objective reality on the Retina. *These colors are there and are truly perceived thereon.* The light, containing within itself all colors, has entered the eye and remains there with this exhibition of its changing phenomena.

14. Defects of Vision corrected by eye-glasses. These defects themselves are real and are depicted and cognized on the Retina. The corrected vision is also real, because by the means of eye-glasses, the corrected picture is thrown on the Retina and there perceived.

15. All kinds of Optical Effects produced by Nature, or artificially. Of the former we have, as already noticed, the magnifying of objects seen through mists; aerial images; the increased and diminished size of objects as they are held near to, or further away from the eye. These

Sun and Moon below Horizon

are true phenomena depicted on the Retina and photographed by the Camera. Of the latter, we have effects produced by the Kaleidoscope; by "Fire-Works;" the appearing of Ghosts in the theatrical scenes, and all forms of theatrical scenery; the effects produced by magnifying glasses. All these are distant objective realities thrown on the Retina and there truly perceived. It matters not *how* the things, the phenomena, the effects are formed, or produced. These are all also photographed and thus proved to be real.

16. Binocular Vision. We have already explained this, showing that whether the Vision be single, or double, the perception is true.

17. Double Vision of the same object. For example, as in the experiment, which we have mentioned, the little finger seen on both sides of a distant object, as a Vase beyond it, to which we direct our eyes. As already pointed out, in this case the pictures on the two Retinæ differ from one another as to the position of the finger. Both are correctly cognized. If we did not perceive this difference, our perception would be at fault.

18. The Sun and Moon visible when below the horizon, and Stars still visible although they may be extinct. These are real phenomena, as proved by the photographic Camera. In the former case, the refraction of the atmosphere brings the light from the Sun and Moon and pictures them on the Retina, where they are truly seen. These distant, visible, objective realities, the Sun and the Moon, as truly enter the eye and are there seen, as when they are both above the horizon. In the latter case, as we have already pointed out, the light which left the stars ages ago is still a real, objective being, still moving onward and entering the eye, as truly as though the stars had not gone out. *We see that which is.* The Camera photographs such stars, and the astronomers

Distorted Images

put them on their maps, in their true places in the constellations.

19. The Dancing of a Spot of Light over walls and ceiling, produced by a small mirror in the hand. This is also an objective reality depicted on the Retina and cognized in its real character.

20. Imperfect and Distorted Pictures on the Retina. Even these are no deceptive Perceptions. They may arise from that which is beyond the eye. When we look through very inferior window-glass, all figures seen may be distorted into most misshapen characters; and our faces, reflected in a poor mirror, may be distorted in like manner. These are phenomena, or effects produced, and as such are depicted on the Retina, and there seen in their ill-shaped forms. If these things were not correctly seen by us, we would be ignorant of some of the interesting and important qualities and activities of the material world.

They may also be due to some kind of trouble, or activity within the eye itself, but, again, the real picture upon the Retina is correctly seen, whatever be its character and however it may be produced. If we did not *see* this, we would be ignorant of this characteristic, or activity of our bodily frame.

21. Light produced by Pressure of the finger upon the Eye-Ball, seen, as has been said, like the end of a peacock's feather; from a Blow on the Head; and from excitation of the Optic Nerve in various ways. There are no deceptions in these. *The Light is produced and we truly perceive it.*

These things are not imaginary, nor subjective. They are *real material phenomena* which we cognize. In speaking of Sensations, we noted that Light is produced in a great variety of ways. In one, or more of these ways it may readily be produced within the organism;

III. Class Apparent Deceptions

and as the eye may be, as some suppose it is, in a measure self-luminous, or absorbs and retains light as luminous paint does, the phenomena of light arising from pressure, or nerve excitation may also be thus explained.

22. Particles seen floating before the eye. These are true phenomena within the Eye itself, due to certain abnormal conditions, and are correctly seen.

II. Class. The Second Class of apparent Deceptions of Perception embraces all forms of *Misinterpretations* of that which is correctly perceived.

A few instances of these, with their explanations, will suffice to show that there is no deception in the Perception itself.

1. Mistakes in judging of measured Distances. These are entirely due to comparison and judgment. We *see* the distance of two objects from one another and from ourselves, and comparing it with some standard, which we have in mind, we judge, or guess, that it is so many feet, or miles. Sometimes, from peculiar circumstances and from our inexperience in regard to them, we find it very difficult to form a *judgment*. Thus a large mountain, rising abruptly from the shore of an expanse of water between it and us, seems close at hand; we simply cannot *judge* rightly from what we correctly see.

We may think, that is *judge*, the stars to be very near, at least much nearer than they really are, but this is because we have no standard with which to compare their great distances; and, moreover, we do not *see* the distance of an object when we look directly at it, as we look at a star, but only when it is seen *perspectively*. Astronomers measure the star's distance by the parallax which it presents.

2. Mistakes as to the size of objects. Here, again, there is simply failure to compare and judge correctly,

Misinterpretations

from what we correctly see. Some individuals may *judge* better than others, and we may improve by practice.

3. When out of sight of land at sea, the landsman may readily mistake low-lying clouds along the horizon as the shore of some country. He *sees* correctly, but makes a wrong inference. He and the seaman *see* alike, but the seaman's interpretation of the thing seen is different.

4. Sometimes Paintings, Statuary, Wax-figures of life-size, Reflections in Mirrors are mistaken in regard to their real character. The perceptions are correct; the mistakes are in the inferences which are made. When we discover and correct the mistake which we made, our *perceptions* remain precisely as they were before.

5. The motion of objects seen from a moving car window. The misapprehension is due to the *supposition*, which we make from the motion of the objects and the car-window past one another which is correctly perceived, as to the cause of the motion. It is only the supposition, which is wrong.

6. Sometimes a Coin, or similar object will appear as Intaglio. I have, in like manner, looked at ornamental frescoes, in shades of the same color, and even at certain drawings and have seen the reliefs as intaglios of them reversed; and suddenly they assume again the characters intended. In this instance, the appearance is due to the way in which I interpreted that which I saw. The former instance is explained in the same way.

7. Things mistaken for other things. In such cases we misinterpret our perceptions. Instances are given above in numbers 3-4-6. These mistakes are very numerous. Another instance is found in the familiar one of "The Mirage of the sandy Desert." There are

III, Class. Failure in Noticing

certain scintillations of the distant, heated atmosphere and certain appearances of ground and sky, which are misinterpreted by the exhausted traveller as fertile places amid the waste. Sometimes one person is mistaken for another; and, by assumed disguises and acting the identity of a person may be hidden and a different individual successfully personified. But this is no error in the perception; it is all in the interpretation.

III. Class. A Third Class of Mistakes includes those, which are due to failure in *noticing* the things perceived.

There is a great difference in individuals in regard to their observation of that which is presented to their vision. Some are very careful, accurate, complete, intelligent, reliable observers; and others are very inattentive, stupid, unreliable. Mistakes often occur from inattention, carelessness, forgetfulness, confusion, from want of alertness and quickness of seeing, from failure to understand the relation and meaning of things. Innumerable instances might be given of this.

For example. Feats of Legerdemain, or of the Prestigitateur. These are as marvellous, as they are fascinating. They are all due, however, to the wonderful skill of the performer, in directing and controlling attention and expectation, and to the rapidity of his operations. He acts too quickly for us to see and notice. The reliable Camera is more quick of action than our vision, and has on this account been used to reveal "feats," which could not be detected by the eye. It is *reported* that Herman, or some other noted Prestigitateur, when on a visit to India, used the instantaneous action of the Camera to detect the feat of the Hindu Fakir which he had twice failed to discover. A child was made to climb a pole and disappear at the top. The photograph revealed the fact that the child did not climb at all. He was quickly spirited away, just as he

Prestidigitateur

II. Class

was about to climb. The "*climbing*" was due to some kind of hypnotism over the spectators; in some way their attention, imagination and expectation were so wrought upon that they supposed they saw that, which they did not see. There are two things to be noted here. In the first place, there was no deceptive perception; for we cannot *see* that, which did not take place. All that *which was seen was perceived correctly*. In the second place, had the spectators possessed the same *rapidity* of *observing* that the Camera had, they might have discovered the nature of the "feat" by their own eyes; unless, perhaps, they might still have failed from the want of proper, unprejudiced attention.

IV. Class. A Fourth Class of Mistakes includes those, which arise from Imagination and Dominant Ideas. We remember that, which we have seen and by Imagination we reproduce it before the mind. By some individuals this is done with exceeding vividness, so that it is almost as vivid as the original perceptions. When this imagination is conjoined with a dominant Idea of the same thing, the effect is of a most decidedly realistic character. Some distinguished Novelists have had, it is said, such power of this kind, that they have seemed to themselves to have lived with the characters and amid the scenes of their own creation. In the every-day life of all men, this effect of vivid imagination and of dominant ideas is of common occurrence to a greater, or less degree. But all this casts no reflection upon the reliability of our Perceptions.

We have the power of discriminating between the operations and activities of our minds; and if we mistake, at times, one of these for another, as, for example, imagination for perception, it is because of our failure in observing and in making the proper discrimination, there is inattention and carelessness on our part.

Dominant Ideas**V. Class**

Sometimes also the glance which we have is so rapid and brief, that we are unable to tell what we saw, and imagination instantly creates something out of the very imperfect data afforded by the glance, and we suppose that, this is the thing which appeared to us; the mistake, however, was not in the perception. The character of the supposition is often determined by some dominant idea, or some expectation. Thus we may be watching for something, when upon an imperfect glance, brief and rapid, at something else, we suppose, or take it for granted that we saw that for which we are looking. When we have a fear of something, a brief glance at some different object leads us to suppose that it is the thing, which we feared.

In the feat of the Hindu Fakir, mentioned above, the operation is so brief and rapid, and the vision, correct in itself, so inadequate, that there is abundant room for the vivid play of imagination and of eager expectation in a moment of intense, excited, all engrossing, rapt attention under the sway of the personal influence of the practised performer.

V. Class. Mistakes which are from Abnormal Conditions of the Soul and Body.

These are well known and are sometimes of the most striking and fearful character. Such are the illusions, delusions and visions of mental and bodily disease, and of impassioned and highly ecstatic exaltations of the Soul. Examples of these are well known, such as the delirium of fever; the horrid fantasies of "delirium tremens;" the hallucinations of insanity; the rhapsodies of over-wrought love; the false views of uncontrolled, impassioned anger; the glories seen by saints in highly wrought-up, religious fervor and as, upon the border of the other world, they seem to look upon its realities.

All these, however, have no direct bearing upon the

From Abnormal Conditions

Infallibility of our *normal* perceptions. With them, indeed, we have no present and direct concern. Our whole present study is of our perceptions in their normal activity. We are dealing only with "*Mens sana in corpore sano.*" It is another question how far and in what way disease and exalted states may pervert our ordinary faculties and activities. Moreover, if the Soul have some unknown, superior power of vision by which it *sees*, under certain conditions, things invisible to ordinary sight, these strange visions *are so far true*. According to our present, reliable knowledge, however, these illusions are properly so designated. They are illusions, not perceptions. They are the activities of other departments of our being.

In this is the explanation of the difficulties which they seem to present, because of their resemblance to perceptions and because they seem to be mistaken for them. The prevailing, abnormal condition of the Soul and Body prevent the individual from noting their true character, and from placing them aright among the operations of the Soul. With the attention and interest of the Soul otherwise thoroughly absorbed, the true nature and place of these activities are altogether disregarded.

Many other illustrations might be given, but, numerous and varied as are the apparent deceptions of Perception, they may all, doubtless, be included within the five Classes which we have presented. From the explanations, which we have given of the instances named, it is perfectly evident that there are no real deceptions whatever, and that our Perceptions are to be relied upon as Infallibly True.

Scientific Sight.

Scientific Sight does not differ radically from ordinary perception. It is superior only in that perception is

Scientific Vision

used to the fullest advantage and in that there is intensity of intellectual activity. By Scientific Vision we see that, which is usually *unnoticed* and *disregarded*. Instead of simply *seeing things*, we see their relations to one another; we see that they are bound together as causes and effects; we notice the order, the uniformity and variation of their coming and going phenomena, revealing the laws of their operations; we observe and distinguish between the varied forces, everywhere prevailing; by instruments, such as the telescope and microscope and the whole array of philosophical apparatus, and by the whole course and manner of scientific investigation, experiment and manipulation we discover vast stores of truths, previously entirely hidden from view.

This Scientific Vision is of the utmost importance; for it is the source of all our higher knowledge of the world which lifts man above the animal creation and each succeeding age above those which have gone before.

But it is to be noted, that the sure foundation of all this knowledge is the *Infallible Perception of Objective Realities which is common to all men* and which animals possess equally with ourselves and often in a superior degree. The Scientist with all his instruments and appliances is utterly helpless without ordinary eye-sight, upon which he falls back and upon which he does and must implicitly rely.

We have thus entered into detail in our consideration of Perception by Sight, because of the peculiar advantages which it presents for our purpose. By it we have been able to give abundant unfolding and illustration of the true nature of External Perception and to explain and remove difficulties; difficulties which are more numerous and greater than those which are presented by our other perceptions. With Perception by Vision well understood all else is plain. It has thus been estab-

The Ear—The Objective Reality Sound

lished, that External Perception is the Immediate Infallible Cognition of Objective Realities which are present to the Soul because presented to it by the wonderfully constructed, extremely delicate bodily organs. Material themselves, they present material realities. Having dwelt upon the Eye with fulness of illustration, there is no need of more than a brief mention of the other organs.

SECTION IV THE OTHER ORGANS

The Ear is a most wonderful and delicate construction. It receives the objective Reality, "*Sound*," which comes to it from a greater, or less distance. The Sound enters the Ear as the Light enters the Eye and is there cognized as is the picture on the Retina. We hear the *Distant Sound*, but not till *it enters* the ear. The Sounds, which come to the Ear and are there presented to the Soul, are of endless variety and come from different directions and from various distances. The perception of these sounds as they are *within the Ear* is infallibly correct. The apparent deceptions are of the same character as are those of Vision and are due to corresponding causes.

I. Class. Real Objective Phenomena which are sometimes regarded as illusions. For example, noises within the organism. These are not subjective, but *real* and as such correctly perceived. All imitations of Sounds, those by the Mocking Bird, by the human Voice, and various kinds of instruments. These also are, objective realities brought to the Ear and correctly heard. Reflected Sounds; these are reflected by something, acting like a sounding-board and their direction is changed, but our perception is correct; for we hear the sounds as they are when they enter the ear. An example of this is found in the Echo. We correctly hear our voice as it goes from us and returns to us again.

Hearing=Apparent Deceptions

II. Class. Misinterpretations. We hear the sounds correctly but misinterpret their direction, and their meaning. Thus some tones of the organ may be regarded, as distant thunder. The notes of Birds, artificially produced, may be regarded, as coming from living Birds. In all cases the *hearing* is true.

III. Class. Mistakes from Imagination and Dominant Ideas. From confused, very brief and low sounds we build something definite from Imagination and because of some dominant Idea in the mind. We may be listening for and expecting the voice of a friend and *think* we hear it when some indistinct sounds come to us. We may, in night, be very timid and every noise is imagined as evil. The hearing itself is correct. A striking instance of illusions due to imagination and dominant ideas is found in Ventriloquism. The performer so works upon the imagination, so instills ideas, and so conceals indications of his speaking, that he leads his hearers and *spectators* to imagine that the words and sounds come from a direction and distance, and are of a different character than is actually the fact. But the *hearing itself* is correct. Our attention, as directed, is so much occupied, that we fail to distinguish between imagination and perception.

IV. Class. Mistakes due to Inattention and Carelessness cannot be adduced to prove that our hearing is wrong.

V. Class. Mistakes due to Abnormal States of Soul and Body. These belong to other departments and activities of our being and are not *perceptions*; though they may be supposed to be such, because the Soul is too much engaged by its abnormal condition to *notice* their true character. If in high ecstatic states and when near to death individuals *hear* voices, etc., as it is said they do, it must be because the Soul has unknown

Perfume, Flavor, Touch Objective

power of perception by which they hear that which is ordinarily inaudible. However, as we said in regard to Vision, so far as our present knowledge goes such things are not *perceptions*, but illusions due to confusion arising from abnormal states of Soul and Body.

So also *the Organs*, by which we perceive *Perfumes*, and *Flavors*, present to the Soul external Realities which it cognizes aright. The things thus perceived may be produced within the organism, or brought to their organs from a distance, but in both cases equally they *are material realities*. Thus the sweetness of the Rose and of other far-off flowers comes, or is borne to us, and *when it reaches* us we perceive it. None of the Mistakes of perfumes and flavors, are in our perceptions, but are due to the causes already mentioned in regard to sight and hearing.

Touch. The Perceptions which we have by the wonderfully delicate organs of Touch are of precisely the same character. They are immediate cognitions by the omnipresent Soul of objects presented to us by "handling" and are infallibly correct. The word "handling" is used in the widest, and even figurative meaning including every "touch." We perceive *distant* objects only by reaching forth our fingers, hands and arms, and by walking to them, unless in some way they come or are brought to us.

All Mistakes arise from misinterpretations, inattention, imagination, dominant ideas, abnormal states, etc., not at all from perceptions.

It is to be borne in mind in regard to all the Organs of Perception, that, though we have placed the various mistakes in different classes, any given one may be due to several, and, possibly, to all the causes mentioned combined.

As there is what we have called Scientific Vision, so

Scientific Perception

there is also Scientific Perception by all the Organs. Thus—

Scientific Perception

This includes all the higher insight into the things perceived, due to using our powers to the best advantage and intelligently.

It also includes that high intellectual use of our organs of Perception, by which we make them co-operate with and aid one another, and by which we co-ordinate all the varied knowledge of external realities thus obtained, and construct therefrom our Conception of the beautiful World, “*The Cosmos*,” as *it truly is*, and of individual objects and groups of things as they *actually are*. Mankind have not been and cannot be deceived in their conception of the world.

The Intelligent Soul in the exercise of its spiritual powers and the use of its delicate bodily organs of perception apprehends and knows the realities which *are* and *as they are*, individually and grouped and combined as one world of beauty and grandeur. The Conception varies greatly, it is as varied as are individuals among men and as are the successive stages in our onward, moving life. But, however varied, the Conception is always *true to the reality as far as perception is concerned*. Often it is most meagre and insignificant, at other times most exalted and soul-inspiring, far-reaching in extent and deeply penetrating into the inmost meaning of things. The great, even extreme, variations are due to the character and activity of the Soul. There are those who have eyes and see not, ears and hear not, they have hands and handle not; there are those who with vast stores of material at hand for constructions of marvellous character build not thereof; all is left unutilized, unconstructed, confused. While there are those who see and hear and handle with the power of trained and

Free from Inconsistencies

cultivated intelligence, who lay hold of the realities presented, and from the wealth of material gained build up with the skill of master architects a Conception, not fantastic, unreal and of their own creation, but the verisimilitude of the world according to the pattern showed to them by Infallible Perception; a Conception true to the great reality, yet inadequate; there are wonders undreamt of in the fulness of the world as it truly is and as known by its Maker.

SECTION V TRUE NATURAL REALISM

The Exposition which we have given of External Perception differs in a most radical and striking manner from those generally prevalent. Our doctrine is the "Natural Realism" of Reid, Stewart, Hamilton, McCosh, but set free from the errors, confusion, inconsistencies, difficulties and impossibilities which are found in their unfolding and exposition of it and which in reality destroy it.

Our Presentation throws aside entirely "*Sense Perception.*" It confines Sensation to our Emotions, that is to the "Feelings of Pleasure and Pain;" it affirms according to the plain and positive Testimony of Consciousness that Color, Sound, Perfume, Flavor and that which is apprehended by Touch are objective, material realities, it denies the distinction between Primary and Secondary Qualities of Matter; it affirms that the bodily organs of Perception present to the Soul, omnipresent within the body, external realities which are by it immediately cognized in their true character. It discards in its explanation all reference to anything of a mystic character, as "By the appointment of Him who gave us our Constitution"—"The Sanction of Him who made us,"—"Original Convictions"—"Innate Ideas," "Native Beliefs." It accepts and deals with facts in a purely

In Accord with Universal Assurance

scientific manner. It recognizes the fact that the Soul has been endowed with the *miraculous* power of stepping over the impassable gulf between the spiritual and the material and of taking direct knowledge of material things which *are*. With this indisputable fact, distinctly apprehended and never lost sight of, it presents "Intuitive Perception" without admixture with anything else, affirming that by it we know and conceive of the Material Cosmos as it truly is in all its attractive beauty and grandeur.

To overthrow long accepted views is difficult in the extreme, and it may be that the exposition which we give will meet with prejudice against it, but it is evident that there is need of a radical improvement in the presentation of Natural Realism. Dr. McCosh says, "We have now before us a more perplexing subject, the idea and conviction which we have in regard to an external world, the way in which we reach these, and the objective reality involved in them. In this border country there has been a war for ages in the past, and there is likely to be a war for ages in the future. * * * I cling to the conviction, that there is a doctrine of natural realism which, if we could only seize and express it, will be found encompassed with fewer difficulties than any far-fetched, or artificial system."

To obtain this Doctrine, it is only necessary to present Natural Realism in its purity and fulness. As presented by us it is perfectly pure and simple; is free from inconsistencies; explains difficulties otherwise inexplicable; it has the plain and positive testimony of Consciousness and is in complete accord with the universal assurance of men which they cannot overthrow; it is indeed the vindication of the philosophy of "Common Sense." The assurance of all is that the beautiful world is such as we conceive it to be, an assurance which is the

Our Cognition of the Cosmos True

common interpretation of the unmistakable Testimony of Consciousness. That which is thus, not the mystic, but the well-founded belief of men everywhere, is precisely the result which we reach by the scientific interpretation of the same Infallible Testimony. Our Interpretation must be true, as it is the same with that given by all men. We teach and they affirm that, that which we have heard, which we have seen with our eyes, which we have looked upon and our hands have handled is the *Cosmos* of which we have a true conception, because we take knowledge of it as it is in its own real and attractive characteristics.

Hitherto there has been a contradiction between Philosophy and Common Sense. As long as this is the case the former must be at fault. For Truth's sake it is absolutely necessary that they be in accord. This harmony is secured by the new Exposition of Natural Realism, which we have been presenting. By it the world in which children have delighted, of which poets have sung, which painters have depicted, which has filled the minds of all men with wondering admiration has been deprived of none of its tinted glories, of none of its varied loveliness, but is held up before us in the fulness of all these undimmed and unimpaired, as real and true.

Philosophy and Common Sense blend together as One.

Having given the Exposition of External Perception, the next step is the consideration of Internal Perception.

Intuitive Perception

CHAPTER VI

Internal Perception

SECTION I SPIRITUAL REALITIES

INTERNAL PERCEPTION is precisely the same as External. The difference is in the things perceived. In the latter case, these are material realities, in the former they are spiritual realities, or the things of the inner world of self. *Theoretically* we might, possibly, conceive of the Soul as endowed with the power of perceiving its own phenomena, but without the power of perceiving those of the external material world. As, however, we know that it possesses both of these, it is impossible for us to draw any distinction between the two powers themselves. *They are one and the same.* All that can be said is, that the Soul immediately cognizes the things of the spiritual and of the material realms. It is endowed with the power of Intuition, by which it looks upon the things which are present to it whatever be their character.

Internal Perception is often called and is properly "Self-Consciousness." It is the consciousness, the "Intuition," the cognition of the things of Self. Such being its character, it is evidently possessed by men and animals in common. Strange to say, however, it is often denied to animals. Rightly considered, it is impossible to conceive how animals can be without "Self-Consciousness." If they are without this they have no Consciousness whatever; for "external perception"

Self-Consciousness in Animals

necessarily includes this. Their perception of material things is precisely the same as our own. But it is absurd to suppose, that they can be conscious of such things and yet be without consciousness of the things of themselves; for in perceiving material things there is the consciousness of the difference between these and one's own self. We have the best of reasons for affirming that animals are conscious of their own being, their feelings, emotions, their loves and hatreds, their wants, their wishes, their efforts, their memory of persons, other animals and things, their remembrance of former pains and pleasures. The evidence which we have of this is as abundant and positive as that which we have of it in regard to ourselves. Self-Consciousness can be denied to animals only by giving a wrong definition to the expression, with consequent confusion of thought and error. This would be the case, if the definition be made "Reflection, or discursive reasoning upon our spiritual states and activities." As animals do not do this, unless it be to an extremely limited degree, they may be said to be without "Self-Consciousness" in *this sense* of the term. But reflection and reasoning are something over and beyond Consciousness, and this use of the expression should be carefully avoided. Were it correct, children and multitudes of men and women, as well as animals, would be without self-consciousness for, at least, a greater part of the time and in many cases throughout their entire life.

In popular language we often speak of one who is full of self-consciousness in public, or in company, and of another who is free from it, the reason being because in the former case consciousness is concentrated on self, and in the latter it is fixed upon others, or upon some work in hand. The same thing prevails in animals, whose consciousness is at times centred upon self, as

Common Opinion Spiritual Unreality

when basking in the sun, or in the enjoyment of their food, and at other times concentrated upon something else, as when all alert in defence of endangered young. Consciousness is strictly "Intuition," the simple looking upon and knowing that which is present. This cannot be denied to animals, whether it be directed to material things, or to self; and to enlarge the meaning of the word, so as to include "Reflection," or Reasoning within it, is inconsistent with the very idea, which it is intended to express.

The perversity of the human mind is very remarkable, as seen, for example, in the persistence with which men in general insist that the material world is the real, the assured, the substantial, the well known, while the spiritual is unreal, uncertain, unsubstantial, unknown, beyond our reach. The reverse of this is undoubtedly the truth.

The Prime Reality for us and the foundation for all other reality is "our own spiritual Being." The basic Truth is "I am" and "I continue to be with an unbroken continuity of being." It is only by knowing *our own reality of being*, that we can and do attribute *real being* to the material world. Without the Intuition of our own being we would not know what it is "to be." Continuity and Identity of being also are attributed to material things only because we first know them as belonging to our own spiritual selves, or at least it is this, which enables us to understand the meaning of them when we cognize them in material things. Our prime conception and assurance of *Real Substance* and the foundation of our knowledge of all substantial being is the Intuitive Cognition of our own *spiritual* substance. Whatever definition may be given of Substance, there is that which we know as substance. We are ourselves real substantial beings. Knowing this, we are enabled to understand substantial being when we perceive it in

Our Prime Reality the Spiritual

the material world, which, otherwise, we could not do. We derive our knowledge of "Power" from the Intuition of our own *spiritual* Power, and it is only in this way, that we understand "force" in material objects.

It is with the world of "Self" that we chiefly have to do. This is for us the *centre of all things*. We may imagine the material world to be destroyed, but that we should cease to be is *unthinkable*, even though our *belief* might be that as a fact, the Soul is annihilated by death. The Spiritual World is, therefore, to us the *Great Reality*. It is also the *well known* and *assured* world. No assurance of Reality can rise higher than that which we have of our own spiritual selves. Even the most thorough materialist has this assurance, for he is, equally with all others, assured that he is a being who thinks, feels and wills, but this is to be a "spirit." His error consists, not in denying this assurance, but in confounding the spiritual with the material. The great mystery underlying substance, being, power we cannot possibly penetrate, but this is no more true of the spiritual world than it is of the material. The latter is not in the least degree better known than is the former; but in truth our knowledge of the spiritual is *superior* to that which we have of the material.

As already mentioned, our prime and basic knowledge of substance, being, power is that which we have of our own spiritual selves and there is nothing which we know more fully, better, clearer, more distinctly and positively than our own spiritual states and activities, our thoughts, feelings, volitions. It is only by knowing these that we know anything. If our knowledge of these becomes obscured and uncertain, the same obscurity falls there-with upon all the things of the material world. We have no *superior* means of knowing material things. The realities of the two realms are alike known by immediate

Why We do not Know the Complete

cognition, with this advantage in regard to the spiritual, they are already within the Soul without the need of introduction to it; there is no gulf of separation between it and them in the nature of their being; and we have the opportunity of scrutinizing them most intimately and at our leisure.

The *Question* may arise why is it that we do not know the *Complete Contents* of our spiritual selves, if we have the power of Internal Perception, which is the cognizing of realities which are present? The answer is, because of the limitation of this power. This is no exception to the rule that all our powers are limited. In one important particular Internal differs from External Perception. The difference, however, is not in the Intuitive Power itself. This is precisely the same in both cases. The difference is only in the *presentation* of the objects cognized. The Realities of the material world, being external and gross, need to be presented to the Soul by special organs of perception in proper delicacy of refinement. Those of the spiritual world, being already within and being themselves spiritual, need no such organs of presentation. Two things, however, are necessary, because of the limited character of our power of perception, in order that they may be cognized.

1. They *must be presented*. They may be self-presented. This is so with all those which are the actual activities and states of the present moment. Arising within and having a greater or less degree of continuation they *present themselves* for our perception of them. This, however, is extremely incomplete. To what extent they are all permanently preserved within the Soul it is impossible to say. In regard to their preservation some writers seem to go to a very great extreme. We know, however, that in a large measure they remain and can be recalled, or reproduced over and over again. When by our power

Contents of our Spiritual Selves

of recalling and *representation*, they are again held up before us they are thus presented for our cognition, otherwise, though within the Soul, they cannot be perceived.

2. The second thing necessary is the *Concentration* of consciousness upon them; this is often called Attention. Realities may readily be present and yet be unperceived because our attention is not directed upon them, or not sufficiently so. Or they may be practically unperceived, though not so in reality; because they were regarded with such little consideration that they immediately faded and were lost, as though they had not been. This is undoubtedly the case with unnumbered instances. It is a well known fact that we can attend to only a few things at a time; some give the rule that we can attend to only one thing *well* at once. We cannot even at the same moment give attention to our entire body. There is here a striking difference among men. Some have remarkable power of diversified attention. Public speakers, having lost their line of thought, have gone on speaking intelligently while they were carrying on a process of thought, by which they have gone back, discovered and picked up the lost line and have then gone forward again with it all unnoticed by the audience with the exception of, perhaps, only one or two very intelligent hearers. Noted chess-players have been able to conduct two distinct games at chess at the same time. School teachers have been able to hear recitations and while so doing have kept a watchful eye over the conduct of the entire school. Still more rare are examples of those who give attention to more than two things at once.

With this necessity of concentrated consciousness and this well known fact of the limitation of our power of concentration, or attention, and the need of the presentation of things, it is evident that it is impossible for us

Careful Intensity of Thought

at present, at least, to perceive at one moment the entire contents of our spiritual selves.

As Internal Perception is Intuition, that is an act of Consciousness, it is Infallible. It is simply the taking knowledge of *that which is* and which is present. Within this there is no room, nor possibility of error. All so-called instances of mistakes, or deceptions, are not such in reality, and are all accounted for in essentially the same ways as already mentioned in reference to the apparent deceptions of External Perception; and which need not be repeated here.

SECTION II SCIENTIFIC PERCEPTION

As we pointed out that there is what we have called Scientific External Perception, so also there is that which we may call Scientific Internal Perception. This is of extreme importance, yet it differs from the ordinary only in the employment of it to the very best advantage and with intensity of accompanying thought and purpose.

In this the acts of Consciousness remain strictly true to themselves, not in the least confounded with the thoughts and purposes under which they act. Though scientific it is strictly *observation*, just as in external perception notwithstanding his telescope, microscope and all his scientific instruments and appliances the scientist is simply an *observer*, he only sees that which is. That which is to be especially noted is, that the Scientific Internal Perception is in itself the same as that which animals and all ordinary men have, though so far advanced in practical results. In all ordinary cases Internal Perception is of the most careless and imperfect character, but our use of it admits of wonderful advancement. We may become most careful, scrutinizing observers of our spiritual states and activities, discovering much to which ordinary men give no heed; *having eyes they see not*.

Two-Fold Intuitive Perception

We have thus presented Intuitive Perception in its two activities, according as it is directed to the things of Self and the things of the Material World. The one power of Intuition may thus be regarded as "Internal and External Perception."

The Soul, being at the beginning a perfect blank, though fully endowed with all its faculties, capacities, laws and characteristics, derives all its knowledge from this power of "Immediate Cognition of Realities." Our *Intuitions* are the origin, the source, the foundation of our entire, known experience. They present all the data, the whole material of our thoughts, emotions, volitions. Furnished with the material thus provided, we elaborate it by the activity of the other powers of the Soul and rise to the true conception of the spiritual and material worlds in which we live and of which we form a part, penetrating more and more into the depths of their mysteries and reaching out after God and the Infinite Absolute, according to our mental endowments and the fidelity with which we use them. To the attainments and aspirations of the human Soul there seems to be practically no limitation, because of its own wonderful endowments and the inexhaustible realities opened out before it, provided it recognizes its own proper realm, that of the Finite and seeks not to penetrate into the Infinite.

Such being the character of "Intuitive Perception," our next step is the consideration of the "Intuitions" themselves, the *Realities* perceived.

By way of preparation we must remove out of the way the so-called Intuitive Beliefs and Judgments.

SECTION III BELIEFS AND JUDGMENTS

It is evident that there are no Intuitive Beliefs. "Intuitions" are things known by immediate cognition.

The Faculty, Beliefs not Intuitive

Beliefs are things known from testimony, reasoning, proof. "Belief" may be defined as a concept and a conviction of its reality, both being derived from and founded upon testimony. As a native, or constitutional characteristic of the Soul "Belief" is simply a "*faculty*," as devoid of *beliefs* as the faculty of external perception is devoid of cognitions. As a "faculty" it may be defined as "the power to appreciate and have confidence in Testimony." It belongs to discursive reasoning. Superstition is this power and superstitions are beliefs. But Superstition is characteristic of the weak-minded and ignorant. These have the faculty, as we have defined it, but within them it is weak. They fail in proper appreciation of testimony, while their confidence is extreme.

There are Beliefs which may *seem* to be self-evident, necessary, universal, infallible. If this be their true character, they are not "beliefs," but immediate cognitions. Or if they are beliefs they only seem to have these characteristics, because of their extreme simplicity; in their case the process of receiving and weighing the testimony is of the simplest kind of reasoning; and because the testimony, on which they rest, is overwhelming.

This presentation is entirely different from the prevalent view.

It is affirmed, that there are "Intuitive Beliefs," which have reference to things *absent* and by which in their highest flights we rise to most exalted realms which would otherwise be unknown. Were they "intuitive," this would be impossible; they would be strictly confined to things which are present.

A great mystery is thrown over them. It is impossible to tell what they are. They seem to be special truths interwoven within our being; it seems as though the Soul had received some new revelation, or was en-

Mystery Seems Thrown over Them

dowed with a "second sight," which sees and knows things unseen by our ordinary power of perception. Sir William Hamilton says: "By a wonderful revelation . . . we are inspired with a belief in the existence of something unconditioned beyond the sphere of all comprehensive reality."

Dr. McCosh says "No man is entitled to restrict himself to cognitions, and refuse to yield to the beliefs, which he is also led to entertain by the very constitution of his mind." "Primitive and heaven-born beliefs." "*Convictions* in regard to something which we *do not immediately know*—nay which we may never be able to know."

All this is a *revelation* of truths to us, springing up within the Soul itself, neither acquired by immediate cognition, nor imparted from without.

This mysticism must be cast aside, and the plain, scientific statement accepted, that all our "Intuitions" are Intuitive Cognitions and that these alone give us Infallible Truth.

Judgments.

We give this presentation supplemental to that given on page 11 seq. on account of its importance.

Judgments are not Intuitive because

1. They belong, not to immediate cognition, but to discursive reasoning.
2. They are not infallible. That, which is a matter of judgment, may be regarded very differently by different individuals.
3. If made intuitive they are identified with immediate cognitions, It would be impossible to distinguish these from one another.
4. The term "Intuitive Judgments" is inadmissible, because it is mystic, inexplicable, unscientific. The ex-

Important that Intuitions be

pression is used to teach that over and beyond "immediate cognition, there is an *additional* source of Infallible knowledge, namely, that of Intuitive Judgment." But what is this? What is the new *vision* by which we see new truth, and see it infallibly and as necessary and universal truth? What makes it infallible? Of this remarkable "insight" no explanation is given. Of it we can form no conception. It is mysterious, mystic. It can only be regarded as a Divine Revelation of Truth. We know what Intuitive cognition is and why infallible; it is because we cognize *that which is*. This is definite and plain; but we cannot tell what that power is which is called Intuitive Judgment, by which we have an infallible insight into Truth, which is different from and beyond immediate cognition, and can not understand what makes it infallible. We have no such power. Our judgments are cognitive, but they differ from Intuitions in that they are mediate, while the latter are immediate.

5. The nature and definition of "Judgment" preclude intuition. "To judge" is to arrive at Truth before and otherwise unknown, by the consideration and weighing of given facts, or data. In every judgment two things are essential; the one that there be a process of reasoning, the other that the truth be not self-evident. If the Truth be self-evident we know it by immediate *cognition* and there is no need, nor room, for Judgment. If there be no process of reasoning, judgment becomes impossible; we are without a foundation on which to rest our judgment, or the means by which we may judge.

6. What we have said agrees with the derivative meaning of the word "judge." It is derived from the Latin "*jus*" and "*dico*," signifying to pronounce right. Having taken everything available into consideration and having given to all their proper weight, we declare that

Distinguished from All Judgments

the opinion which we form, or the conclusion at which we arrive is right, it is the correct, the true one, the one in accord with the facts. But this is reasoning and there is large room for error. Further consideration, and additional data might lead us to a different opinion. There are some judgments where the process of reasoning is so simple and rapid, and the conclusion so evident, that they are almost "self-evident truths directly cognized," and from these it may be hard to distinguish them; but this must be done in order that they be known in their true character.

It is of the utmost importance that Intuitions, and all Judgments be properly distinguished from one another. We have two different things, and we should have a peculiar name for each; otherwise confusion and most serious error result. To "cognize" is one thing, to "judge" is another.

With this removal of the so-called Intuitive Beliefs and Judgments, we pass to the consideration of our Intuitions, the Realities Cognized.

Intuitive Perception

CHAPTER VII

Intuitions

SECTION I CLASSIFICATION

FIRST and foremost among our Intuitions are all our "Perceptions" of the concrete "things" of the Spiritual and Material Worlds. These are innumerable and of the most varied character, and constitute the sum and the substance of all our knowledge.

I. Our Perceptions of the things of the Material World are "Intuitions." Our outlook upon it as a unit and our vision of its individual objects and varied, changing phenomena. As before pointed out, our invariable and distinct use of the term "phenomena" is in the sense of "*Manifested Realities*." All these Realities, as we are in the act of looking upon them, as garnered in Memory, and held up before us by recollection, are Intuitive Truths, or Intuitions.

II. Intuitive Truths are, still further in detail, all the Relations of Material things to one another which are immediately cognized. Their apartness from one another; their varied distances and movements; their figures and sizes; the way in which they act and react upon one another; the diversified manifestations of forces; causes and effects; the harmony and discords, the uniformity and variations of Nature; the abiding being and real entity of things; the transmutations of the state of things from solid to liquid, to vapor, to gas; changing shapes, unity, individuality, identity; divisions and sub-

Four Classes of Intuitions

divisions, separations and unitings; all observed laws and every thing that is an object of observation. These Intuitions are, to a great degree, from the more careful and intent cognition. They are simply the observation of things, which multitudes of men may carelessly fail to notice, and they may be such as are perceived only by the best observers; deeper, less obvious truths, obtained by what we have called "Scientific Perception."

III. In the next place, Intuitions are those facts and relations of the material world which are immediately cognized and are perceived to be universal and necessary. These are such as the Truths of Geometry, Arithmetic, Cause and Effect.

IV. Yet again, Intuitions are these "Necessary Truths" when *formulated* into axioms, principles, rules by the discursive reason, *so far as this is done correctly*. These, however, are "Intuitions" in a secondary sense; as they are only our *statements* of that, which is Intuitive; and as we are liable to greater or less misstatement, there is in them an element of fallibility.

Corresponding with these Intuitions of the Material World, there are those of the Spiritual.

I. All our Perceptions of the things of our Spiritual Selves are Intuitions. Our immediate Cognitions of our states, faculties, activities. All these as a unit and as individual objects of observation; all the varied and ever changing "phenomena" of the Soul, these and all our knowledge stored in Memory, and held up before us by recollection. These form a vast array of Intuitive Truths.

II. Still further in detail, our Intuitions are all the Relations of these Realities of the Soul to one another which are immediately cognized. The individuality and diversity of our varied faculties, and their action and reaction upon one another, the peculiarities of their activities, the uniformity, the contrasts, the harmony and dis-

Intuitions of the Spiritual World

cords by which they are characterized; the rising and falling, the coming and going, the associations of thoughts, emotions, volitions; the distinction between the things and powers of the Soul and those of the Material World; the relation of the Spiritual to the Material; all observed laws and every thing which comes under observation within ourselves. Here again, we have much which may be unnoticed by men in general, and much which may be perceived only by the best observers and by "Scientific Perception."

III. Intuitions are, yet again, those facts and relations within the Soul which are immediately cognized and are perceived to be necessary and universal Truths. They are such as Personal Identity; the essential distinction between Spirit and Matter; Cause and Effect; the laws of mind, as the Truths of Logic; Right and Wrong; Moral Obligation; Free Agency; Responsibility.

IV. Intuitions are also these necessary truths when formulated into axioms, maxims, principles, rules by the discursive reason, *so far as this is done correctly*. But as these are our own statements of that which is Intuitive, they are only intuitions in a secondary sense, and have within them an element of fallibility, as we are liable to greater or less error in our statements.

In regard to all "Intuitions" it must be noted that they are always individual and in the concrete; never abstractions and generalizations. We make no attempt to give a complete list of our Intuitions, nor to arrange them in systematic order, beyond the above given statement of the classes to which they belong. We present, however, the exposition of some of the most important.

SECTION II BEING

This may be regarded as the Primary One among all our Intuitions. This is our distinct Consciousness,

Conception Definite and Clear

prominent above all others, "I am," or in its fulness, "I am, and I continue to be with an unbroken continuity of Being." And it is this Intuition which enables us to form a distinct conception of the "Being" of other Persons and of Material Realities. Of "Being" no definition can be given. The word itself is simply the name which we give to the thing known. The "thing" is an ultimate Truth, a Truth of absolute simplicity. All that can be said is "Being" is being—"To be" is to be. And it cannot be known except by the immediate cognition of the thing itself. It is not on this account something indefinite and obscure. On the contrary, it is perfectly well known. Our conception of it is most definite and clear. In these respects there is no conception which is superior to it. When we affirm, "I am" we know precisely and indubitably what we mean, as much so as when we speak of figure, size, expanse, solidity, etc. All these are simple things immediately known, or not at all; and our knowledge of them is complete. *Moreover*, our conceptions of everything else are definite and clear only because of and in proportion to the definiteness and clearness of our conception of "Being." Without this, we can have no conception of another Person, of a horse, a tree, a house, a stone; they are nothing—*they are not*.

Again, "Being" is a "*Quality*," though this has been denied. That of which real "Being" is a quality is Substance. There is no actual "Being" without an individual Substance of which it is a quality. The two are inseparably connected. In knowing the one we so far know the other. We cannot think or speak of actual Being without thinking, or speaking of some substance of which it is a quality. Our Consciousness is "I am." I, the substantial Soul, have being. Substance is that which has "Being," it is that which is. Substance is more than "Being," for "Being" is only one of its char-

Being a Quality of Substance

acteristics, or qualities, which are many and varied. Substance may be defined by stating the qualities, so far as these are known, but "Being" cannot be defined, for, as we have said, it is itself an ultimate, simple thing, a single quality of something else.

It is evident that "Being" is a quality. It is that which we affirm of a thing, which we attribute to it, which it has, which belongs to it, which is characteristic of it. It is expressed by the verb "*is*," of which substance is the subject. Still further, "Being" is a quality, because it is the manifestation of the substance. It *shows* itself by its own presence, its being here. At school we used to answer the roll call by, "Adsum," "I *am* here." To the question, is there any such a thing as substance, it answers for itself, "Adsum." To the cognizing on-looking Soul, it is an "I *am* here." As all these things are true of "Being," it is hair-splitting to attempt to distinguish between it and quality. In saying, page 112-120, that Time is an Attribute of finite Being, this word is used as meaning Concrete Being, a Being, an Entity. Moreover in the sense of an attribute Being involves Time within itself, for Being however brief is essentially enduring; "I am, I continue." Here language is inadequate, the same word has two shades of meaning. Mention must again be made of Being, when we speak of Substance and Reality.

SECTION III SUBSTANCE

The prevalent Realistic Presentations of Substance are unsatisfactory, obscure and in some measure erroneous. It is a topic of extremest difficulty. "Substance" seems the most profound and elusive of all things. We can readily and definitely think of Being, Figure, Size, Solidity, etc., as these belong to and are the manifestations of something. But how shall we think of the very

Qualities differ from Substance

thing itself in which these inhere and which they reveal. What is the thought of it apart from its qualities, and in what sense and degree is it identified with, or distinguished from them? We give the following.

Definition

Substance is the Elemental, Ultimate Thing, *an individual Unit*, or "Entity," Self-Existent, or created; indestructible except *ab extra*, the Basis of its qualities giving to them their being, binding and holding them together in its own individual Unity and Identity, known as an individual abiding Unity and as Self-manifested in its known qualities including those revealing its Unity, the qualities abiding immutable amid their changing phenomena, and *is*, over and beyond this, an unknown and unknowable Elemental, Ultimate thing.

Any actual Substance may be defined by enumeration of the known qualities, belonging to it as an individual, abiding Unit.

Qualities differ from Substance. They are individual, single things of prime simplicity and admit of no definition; known by immediate cognition, otherwise unknowable; deriving their being from Substance and having it therein, without which they are naught. While Substance is complex; it has its own created being and the varied qualities by which it is characterized, together with much also which is unknown and unknowable; and may be defined by the enumeration of its qualities and statement of its "Entity." How do we know that there are these *two* different things, of which we can and do form distinct conceptions? It is because of the known facts of Consciousness.—*Substance* is cognized in the concrete *as an abiding Unit* with unchanging created being having varied qualities with actual and potential, and consequent changing, phenomena, some of which

Obscure Prevailing Views

cannot be actual together at the same time, being incompatible with one another; while *Qualities* are cognized each one as a separate, absolutely simple thing, with no being of its own but having its being in that to which it belongs.

Some statement regarding the obscure and erroneous, prevailing views will be of advantage. Sir William Hamilton says of Substance, "The unknown basis, which lies under the various phenomena, or properties of which we become aware." "It may be used to denote that which exists absolutely and of itself; or it may be viewed as a basis of attributes," "as conjoined with them." "In different relations, a thing may be at once considered as a substance and as an attribute, quality or mode." "Substance is thus a term for the substratum we are obliged to think to all that we variously denominate a mode, a state, a quality, etc." "Compelled to refer to an unknown substance."

These are imperfect statements, with elements of error. The expression "which exists absolutely and of itself" is an *unguarded* one exposing Realism to irresistible attacks. There is no such Substance but the Infinite, the Divine. The Finite does not exist absolutely and of itself. It is created and dependent. As described it is *unthinkable*, it cannot be cognized. It is erroneous to say that in different relations "a thing may be at once considered as a substance and as a quality." The two are *contradictory*; a substance has a being of its own; a quality has no being of its own, its being is in the substance. Undue separation seems to be made between Substance and its Qualities, the one unknown, the other known, conjoined with one another, losing sight of the fact, that the qualities are the *substance manifested*, and that this is not altogether unknown but is in part known in its qualities and as an individual unit, with peculiar

As to What Substance Itself is

characteristics as such. Moreover, there is the mysticism to which we have repeatedly objected. Substance is said to be something to which we are constrained, compelled to refer qualities. It is also called "a primary belief." The thought of Substance mysteriously arises within us. The mystery is not removed by saying it is a law, or necessity of the mind, or a mental impotence.

The view of Dr. McCosh appears obscure and at fault. He says, "But I see no evidence for the existence of any such thing as a substance in the other sense that is as a *substratum*, lying in and beyond, or standing under, all that comes under our immediate knowledge." He here seems to deny the essential fact that Substance is a *basis* of its qualities and in a large measure something unknown; and makes no provision for binding the qualities together. He identifies substance and its qualities, and yet apparently makes them two different things *each* known *equally* in one undivided act. But it is not made plain what the *substance is* which is thus known *equally* with its qualities. It is said to be a thing, a reality having being, power and permanence. But these are *qualities*, not the reality itself. The thing, as described, is an unknown thing, not something known *equally* with its qualities. "The Substance is the very thing itself considered in a certain aspect, and the qualities are its action, or manifestations." "No doubt a Substance is a thing *known in itself*." We know Qualities, and Substance as *manifested* by them, but what is the further knowledge which we have of it apart from these in the very thing itself?

He adds, "I object to our conviction in regard to substance being called a "concept," a phrase denoting an abstract and general notion . . . the conviction is the intuition." All our Intuitions are "concepts." They are the *knowledge*, that is the conceptions which we

Exposition

have of things directly cognized. If "Substance" be not a concept it certainly is not a thing *known* in its very self. That of which we have no conception is to us a thing unknown; and the conviction is destroyed also, for this is nothing but the assurance of the thing cognized, because we *know* that it is and that it is what we know it to be. Moreover, the question is what is the *Substance* of which we are convinced that it is? And if the Intuition be only a "conviction," how does it differ from Hamilton's "constraint," "belief," how is it any less mystical and objectionable? It is also incorrect to say, that our Intuition does not affirm whether Substance is *underived*, or *created*. The positive affirmation is that it is finite and is created. It is known as an effect requiring a cause. The Infinite Substance itself does not come within our Intuition,

The consideration, which we have thus given, of the prevailing views, prepares the way for our Exposition.

Exposition.

Substance is that which has its own individual abiding being, or which itself is, whether self-sustained or dependent, and which is indestructible, which manifests itself by its qualities, with which it is identical, from which it is inseparable and of which it is the basis, and which is in large measure unknown.

It is not altogether unknown and unknowable; for we know it, so far as we know its qualities, its self-manifestations and itself as an individual unit with characteristics as such.—The self-sustained is the Infinite, the Divine; the dependent is the created.—The abiding being is of greater, or less duration, or age and cannot cease to be except *ab extra*.—The individuality is that which makes it an "Entity," a "Unit," its own self separate from all other units, or entities.

Flash of Lightning a Substance

According to this definition, a Flash of Lightning has its substance, or *is* a substance, none the less so, in reality, because of its instantaneousness and attenuated character. It has its own individual being and manifests itself by its qualities, from which it is inseparable and with which it is identical; so far as we know these we know the substance itself. It is instantaneous, because the flash of light ceases with the cause *ab-extra* which made it. The Electricity has leaped and diffused itself. In the electric arc-light, the spark, or flash continues because and as the flow of electricity continues. The flash of Lightning is not an appearance, an unreality. It has its *substance* of which it is the manifestation, or quality in the violent vibrations of the Ether. While these last the flash of lightning is a substantial reality; it is the Ether manifested; in knowing it we thus far know the Ether. When the Lightning ceases, it has not become nothing; the Ether abides, the energy has been transmuted. Though we have been taught this by science, the most ignorant know that the flash of lightning is the manifestation of something, it is not a mere appearance, it is a reality, oftentimes to them a dread reality.

Again, an "Imagination," a "Phantasie," which we hold up before our mind is according to the definition given a *substance*. It may be of very brief duration, but ceases only *ab-extra*, only with the cause which gave it birth; but while it continues it has its own individual being, separating it from all other Phantasies of our own mind and the minds of others, and it manifests itself by its qualities, from which it is inseparable and with which it is identical, in knowing these we so far know its substance. It ceases only *ab-extra*, when our mind ceases to construct it. It is not a mere appearance, an unreality, but has its *substance* of which it is a quality and a manifestation in the Soul, active in the use of its imagi-

Substance beyond its Manifested

native power. While this continues in that particular way the Phantasie is a substantial reality; it is the *Soul* thus manifested. When that particular Phantasie ceases, it does not become nothing, the Soul abides; the energy is transmuted, not destroyed. What is true of these two instances is true of all things.

When it is said that Substance and Qualities are inseparable and identical, and that in knowing the latter we know the former, it is not meant that we know all the qualities, and that substance is only what we know it to be. The qualities unrevealed may far outnumber those which have been made manifest; and the substance is not simply a quality, nor a *collection* of qualities; it is an unknown something *in addition* to its qualities, to which they belong and of which they are the manifestation. In knowing a quality of a substance we know the *substance itself*, but not the whole of it. There is more of which this is only one of its manifestations, and in which this consists. In knowing a second quality we do not know that which is a quality of the first *quality*, and a manifestation of *it*, but we have an additional knowledge of that thing of which both of these equally are qualities, and of which they both are manifestations. Again, in knowing a number of *additional* qualities, we do not know that, which are the qualities of the other two *qualities* and manifestations of them, so that in knowing these additional ones we know them, these being identical with them. This is contrary to fact. The qualities are *separate* and different from one another. The additional ones are, equally with the first and second, qualities of the *substance* of which all are alike the manifestation and with which they are all identical; the Substance being something unknown and unknowable, except the slight knowledge which we have of it in its qualities, and as a Unit.

Qualities an Unknown Something

It is beyond its manifested qualities an *unknown something* of which these are the manifestations, in which they inhere and by which they are bound and held together in the unity of its own abiding, individual being, and—Substance is *not altogether unknowable*, something separate and different from its qualities, hidden beneath and supporting them; but it is a something of fathomless depth, of which we have a superficial knowledge through its self-manifestations, in which its qualities inhere, to which they belong and by and with which they are bound and held together as a Unit; the Qualities

“Distinct as the billows,
Yet one as the sea.”

the Substance a sea of fathomless depth, known in its surface tossing itself into waves.

Scientists assume and act upon this assurance. They speak of “Elements.” These are things which cannot be separated into component parts, such as gold, silver, carbon, oxygen, hydrogen. They know *these* because they know some of their qualities, but their knowledge is extremely limited. These elements are far more than Science knows them to be. There *are* such things as “gold,” “silver,” “carbon,” “oxygen,” “hydrogen,” but beyond a few of their qualities Science is profoundly ignorant of them. It is a simple and a real truth to say that there is such *a thing* as the Element “Gold,” in which the few known qualities inhere, to which they belong and by and with which they are bound and held together as a unit, but which beyond this is altogether unknown. As a fact, the element “Gold” is an unknown something over and beyond and different from its known qualities, and this would be true were *all* the qualities known. Its qualities do not constitute “Gold.” It is “Gold” which gives them their being. They *are*, be-

Ultimate Truths and Objects

cause "Gold" is.—We might have three boxes of the same size, and elaborate design, one of gold, one of silver, and another of carbon. The qualities of these boxes, size, shape, ornamentation, *precisely the same* in themselves, would have their material abiding being in the three different elements, gold, silver and carbon. In each case they are the qualities of the element of which the box is made; in the one case, they are the qualities of gold, in another of silver and in the third of carbon. Were these elements destroyed, these qualities would cease to be. But though the qualities mentioned are thus identified with these elements, the elements are other than and different from these qualities, and it is *because of this difference* that the boxes, otherwise exactly the same, are different from one another with all the difference between gold, silver and carbon, the three different elements; one box is *gold*, another *silver*, the third *carbon*. It is not the qualities mentioned, but the *elements* which make the difference. And if we had never heard of gold, silver and carbon and knew not their peculiarities, we would know the qualities of the boxes, but that of which the boxes are made and in which the qualities have their being would be unknown elements.

As there are ultimate Truths, so also there are ultimate Objects, or Things. These are what the Scientist calls "*elements*" and the Philosopher "*substances*." They are known by us in a few of their qualities, but beyond this they are utterly unknown things which give being to their qualities and bind them together as units, as gold, silver, carbon, etc. As a box, with all its characteristics, differs from the elements out of which it is made, as a house, with all its exterior and interior peculiarities differs from the materials of which it is built, and as both have their being in the things of their

Definite Concepts of Two Things

construction, so the qualities of the substance differ from the substance in which they have their being. Hence putting together what we have said, we state it thus:—

Substance, both spiritual and material, is the Basis in which the qualities inhere, which gives them their being and binds and holds them together in its individual Unit, manifesting itself through them, but remaining otherwise an indestructible, elemental, ultimate thing.

Thus without obscurity, or confusion, there are *two* things, *both* of which we know with *definite conceptions*. 1. The *Qualities*, known by direct cognition, which have their real substantial being *in* the substance, a partial manifestation of which they are. They have no reality, but are imaginary, fictitious, naught, *they are not* except as they are substantial in the Substance to which they belong. 2. And there is the *Substance* known by direct cognition as an Elemental, Ultimate Thing, that is an Individual Unit with its finite abiding being and peculiarities as such, manifested in its qualities and, baffling every effort of ours to know the fulness of its mysterious self. There is some truth, therefore, in the familiar expression, "We know only the qualities of a Substance," if properly understood as meaning, "We know the Substance as a Self-manifested Unit."

Substance is *Finite and Created*.—Its finite character is very distinct. But as finite it cannot be eternal, nor self-existent. Its being must be derived. Known also as an *effect*, as it very clearly is, it must have had a First Cause, a Creator. Being a finite, created reality it is *indestructible* except *ab-extra*. That which *is* cannot become nothing. Its ceasing "to be" would be an effect requiring a sufficient cause. A real Entity can neither come from *nothing*, nor pass into *nothing*. It ceases only by the withdrawal from it of that which gave and

Self and Material Realiz=

maintains its being; that which gave must take back the being into itself.

All that which we have presented is according to the *evident Testimony of Consciousness*, thus—I. Our *primitive* knowledge of Substance is by *the direct cognition of ourselves*. The Soul and its Qualities are directly known by us in the same act of cognition; they are identical and inseparable. But we are conscious of the Soul as being more and other than its qualities. We intuitively know “Self”—the “I myself”—the “*I*” who am. We know “Self” as an *individual Unit* that is and continues to be, with a being of its own, finite and created; that thinks, feels and wills; that possesses and exercises these powers; that *binds and holds* them together as an abiding Unit manifesting itself in them, but otherwise utterly unknown. In other words we know “Self” as a “Substance,” that is a “*Unit which is*” and is the basis in which its powers inhere and of which they are the manifestations, and beyond which it is an unknown elemental, ultimate thing.

2. We cognize *material* realities in the same way as “Units,” or individual things which *are* and continue to be with their own finite and created being; having and manifesting themselves in their qualities; binding and holding them together in their individual units to which they belong, but otherwise unknown, elemental, ultimate things. We do not cognize material objects as mere qualities separate from and independent of one another, but as bound and held together, in each case, by something otherwise unknown to which they belong. Thus, I am now looking at a leaf on a tree. I know that it is not a mere appearance, that it is a Unit, an abiding reality and as such is *something more* than expansion, figure, size, green, motion, though I do not know what this something more is.

ties Cognized as Substances

How then do we know that there is *Substance itself*, as well as Qualities?

It is by the *Direct Cognition* of it. We cognize, in the concrete, individual objects, "that which *is*, which is cognizable and is cognized." They are perceived as Elemental and Ultimate; we cannot resolve them into component parts; we cannot look into their inmost nature; the *beginning* of our knowledge is as they are cognized, we cannot go further back. We immediately perceive them as "Units," finite and separate from all other units, each having its own inherent being of unbroken continuity, incapable of destruction except abstractly, with varied and changing "phenomena," that is manifestations, actual and potential of its qualities, bound and held together by it in its abiding unity and identity.

Such is our Cognition of Substances.

It is to be noted that all this Testimony of Consciousness, which we have been giving, is *Cognition*. The expressions used by Hamilton and others, "we are constrained to think of a quality as inhering in some basis," "compelled to refer it to an unknown substance," "conviction," "belief," are objectionable. The question arises what constrains, or compels us? Whence the conviction, the belief? These expressions would not have been used had there been the proper thought of "Intuition" as "*cognition*." We are constrained, compelled, convinced only because by Intuition we *know the fact*, that is directly cognize, as we have pointed out, that realities are more than mere qualities.

Having our Intuitive knowledge of the two Substances, the spiritual and the material, we form therefrom by discursive reasoning the *formulated* concept of Substance, as given in the Definition presented at the

Concept of Substance

Elements of

beginning of this discussion, and we have this definite Conception of an *actual* Substance.

A Finite Individual Unit, abiding with unbroken continuity of being, indestructible, characterized by various, unchanging qualities inherent within it as a basis and by changing phenomena, actual and potential, and otherwise a mysterious, immutable ultimate thing.

This Conception is as clear and definite as that which men, apart from science, have of the Sun. They conceive of it as a finite, indestructible, abiding identical Unit with its qualities and varying phenomena, its size, its shape, its radiant light and heat, its rising, southing, setting, its movement along its path amid the constellations, but an impenetrable mystery as to what it is in its own constituents and structure, its interior activities, the source of its light and heat and moving power.

The Elements of our Conception of Substance may be stated thus :

1. It is that which *is*, is cognizable and is cognized.
2. A Unit.
3. Being of its own.
4. Finite and Created.
5. Individuality ; separation from all other units.
6. Indestructibility, except *ab extra*.
7. Possessing and binding together innumerable Qualities.
8. Self-manifestation in its Qualities.
9. Indestructibly the same under all possible conditions, mutations and length of time in Self, qualities and potential phenomena.
10. Changeable in actual phenomena, some of which, in many cases, are incompatible with one another, and can not exist together at the same time.
11. Uniting with other substances without self-destruction and without confusion of itself and qualities

Recent Attacks upon Realism

with them and their qualities; ever necessarily true to itself.

12. Essential Distinct Duality of the Finite; "the Spiritual *and* the Material."

13. Essential Oneness of the "Infinite Absolute." The One Divine Spirit.

SECTION IV REALITY

Recent attacks upon Realism have been regarded as most brilliant and serious, even, perhaps, necessitating some modification of the Doctrine that it may be maintained. *They, however, fall short of their aim.* An unjust advantage is taken of the imperfection and inadequacy of human language to express philosophical truth, and by a most extreme restriction of the meaning of the definitions and expressions employed by Realists these have attributed to them the assertion of that which they do not teach and do not believe. It is impossible, in presenting abstruse philosophical truths, to find words, definitions and expressions in which extreme hyper-criticism cannot detect imperfections and weave out of them entangling difficulties. The attacks are upon the language employed by Realists and not upon *the facts of* Consciousness, which they present and upon which they insist.

Our Exposition of Reality is the statement and unfolding of the Infallible Testimony of Consciousness. This is the *Impregnable Stronghold of Realism*. We immediately cognize "Reality" and this Reality is true. It is what we know it to be; there is no room for error, because the thing itself is seen, looked upon, "taken knowledge of."

Definition.

There is and there can be no "Reality" without Sub-

“Being of Being” and “True Being.”

stance. All things are either Substance, or Qualities. These both are Real. The Substances have a reality of their own and Qualities have their reality in the Substance to which they belong and in which they inhere; without a Substance, giving them substantial Reality, they are naught. The question, therefore, is—What is Substantial Reality? or, “What is the Reality of a Substance? What is it for a Substance to be Real?”

This is the “Being of Being”—“The Being of Existence”—“The Being of the Thing in being.” That which is *is*. Hence it is “Property of Being”—or “The Proprietorship of Being”—“The ownership of Being.” “That which has its own Being,” or a “Being of its own”—“an own-Self Being.” “A Being within its own Self,” whatever be its origin, whether self-existent, or derived and maintained.

Still further, it may be called “The Truthfulness of Being,” or “True Being.” Truth is the correspondence of one thing with another, or of one proposition with another. There is “Truthfulness of Being,” or “True Being,” when “That which is *is* what it is,” or when “That which is *is* what we cognize it to be.” And of things which we do not cognize—“That which *is*, what we think it to be.” If our thought of it be true the thing of which we think is Real; if untrue, there is no such reality. Unknown Realities are things which have an “own-Self Being,” self-existent, or derived, *are* what they *are* and are what we would know them to be, should they come within reach of our immediate knowledge.

Our Intuition, our direct cognizance of things is in the concrete and is that they are *Real*; that they *are* with an own *Self-Being* and *are what we know them to be*. This is not, that they are *because* we know them, but we know them because *they are*. In reference to ourselves,

“ True Proper Being ”

we are *Realities* ; that is we *are* with our own Being and *are* what we know ourselves to be, namely, “A Spiritual Substance with being, thought, emotion, will.” In reference to the Material World, it is a *Reality*, that is, it is what we know it to be, “A material substance with its own being and its peculiar manifested qualities and different from our own substance;” a difference expressed by the terms material and spiritual. The origin and foundation of our Thought and assurance of Reality is the Infallible Testimony of Consciousness that “cognized things” have an own Self-Being and *are* what we know them to be.

Here is the *Proprietorship* and *Truth* of Being, and this is that which we call “*Reality*.”

This may be more concisely expressed by the Term “True Proper Being,” or, yet more concisely, “Proper Being,” the word “Proper,” being used in the same sense in which astronomers use it, when they speak of the “Proper Motion” of our Sun and of the Stars. We, therefore, give the two definitions Reality is “True Proper Being,” and “Proper Being.”

Exposition.

In presenting Reality, as we have defined it, the question arises, What is it “to be?” What is “Being?” The Thought of “Being” is so simple, primary and subtile that it is impossible to give expression to it in words, or to form a definition of it. “Being” is a simple fact of Consciousness, of which we must be conscious in order to know it. We know what it is “to be” by being conscious of it. The affirmation of Consciousness is “I am,” “I continue to be.” 1. Here we have a definite something to which we give the name of “To be,” or “Being.” It is a characteristic, a quality, a property, an attribute of ourselves. It is not apart from ourselves,

Statement of the Facts of Con=

but is as *belonging to ourselves*, to the substance constituting ourselves. I am a substance *possessed* of characteristics, or attributes. These attributes have no being apart from the substance, neither has the substance any being apart from its attributes; hence substance is not apart from "Being," nor "Being" apart from substance.

2. Again, by Consciousness I know that mine own substantial "Being" is not self-existent, nor eternal; it is an "effect" and hence must have a First-Cause; this is the Creator. In this is involved that mine own "Being" is dependent upon Him, I know that my Being has an inherent persistence; it cannot be self-destroyed, nor can it be destroyed, that is it cannot become nothing, except by the act of the Creator; and even this would not be a becoming nothing; it would be the return of "being" to the Being, whence it came.

3. I am conscious, that I myself am an indivisible Unit, and that I have an unbroken continuity of continuation. "I am, I continue to be." This is my immutable Identity. If I have had a past, it must have been by the unbroken continuity of my Being; if I have a future, it also must be because of this.

4. I am still further conscious that I, who am, am possessed of inherent powers and that I stand related to other beings, and that I and they act and react upon one another.

5. In the next place, I am conscious of other beings. I directly cognize material things. Material is the name given to the things, which I cognize as having qualities opposite to my own, which must, therefore, inhere in a different substance.—Knowing by my own consciousness what "Being" is, I know what the "Being" is of the material things which I cognize to be. I cognize that these things have the same "being" that I have; that they have a *being of their own*, that they are not eternal, nor self-existent, but have a First Cause, the Creator; involved in which is their dependence upon the

sciousness as to "Proper Being"

Creator. They have an inherent persistence, that is they cannot be self-destroyed, nor destroyed, that is become nothing, ab-extra, except by the act of the Creator; and even this is not becoming nothing, but is the return of "Being" to the Being from whom it came. I, however, cognize that these material beings are numerous and that they are divisible, as far as they are cognizable by us. The units which we cognize are divisible into parts. But the undivided units, as long as they retain their unity, have an unbroken continuity of continuance. This is the immutable identity of their own being, and when divided into parts this identity remains unimpaired, as each part continues with the same unbroken continuity of being, which it had before. 6. We still further know that there are other *spiritual beings* besides our individual selves, because we *cognize* the effects which they produce and by which they are manifested. Knowing our own "Being," we know what theirs is, or what it is for them "to be."

All these are facts of Consciousness.

Thus we know what both "*Being*" and "*Proper Being*" are; we know each by direct cognition of itself, and hence know that they are infallibly what we know them to be: we know them as well as we know what thought, emotion, volition are. Thus we know the "Proper Being" of the Spiritual Substance and the "Proper Being" of the Material Substance; the former in the individual persons in whom it consists, and the latter in all the units in which it consists; and we know that they are what we cognize them to be; they are *True*.

1. When we say of *Persons*, that they are *real*, it is meant that they have this "thing" which we call "Being" and which we know by direct cognition is their own, and that it is what we cognize it to be. It inheres in them; they *are* and are incapable of self-destruction and of de-

Realities due to Secondary Causes

struction *ab-extra* except by act of the Creator, who both made and upholds them, and they continue to be with unbroken continuity of being whether there are other created beings or not. When we say of *Material Things* that they are *real*, it is meant that they *have as their own* the thing which we call "Being," which we know by direct cognition, and know that it is what we know it to be. It inheres in them; they *are*, and are incapable of self-destruction and of destruction *ab-extra* except only by act of the Creator, who made and upholds them; and they continue to be with unbroken continuity of being whether there are other created beings or not.

Thus we have in every individual Person a *real*, abiding, spiritual substance; and in every Material thing a *real*, abiding material substance; as each has it *own*, its *proper* "Being" and both are *True*.

2. In addition to these, there are other beings which, though originating in and dependent upon the Creator, are due to Secondary Causes; that is to the action and reaction of different beings upon one another; or are effects produced by the activity of various forces within one, or more beings. These things have "true proper Being," that is Reality, but it consists in that of the substance in which they inhere and to which they belong as its qualities and activities.

Thus, for example, our thoughts, emotions, volitions, which are purely subjective, have "true proper being," *reality*; but this is that of our own selves. As they rise and fall, and change, and come and go, this is but the activity of the one real Entity, ourselves; there is no change, nor creation, nor destruction of reality. Again, those thoughts which are due to external, material things, being our cognition of these things, have "True proper Being," Reality, but here also this is the Reality of ourselves. They are the activities of our own real

Phenomena of the World Real

Entity, fashioning themselves according to our cognition of material objects. It is true that they are due to material objects and could not have been without them, and change the moment the material objects are withdrawn, yet they inhere in, belong to, and are the activities of our own real Entity, and in *it* they have their Reality.

Again, the continually changing phenomena of the material world have "Proper Being," or Reality, but this is in the reality of the material real Entity. As they come and go they are the activities of the material Entity in which they inhere; there is no change, no creation and destruction of "Being." As long as the phenomena last they have their "Proper Being," Reality; when they depart there is simply a change in the activity of the material entities, to which they belong and of which they are the activities.

There are some material things *which are due to man*, to his thought, his will, his activities. Without these they would not have been, and often they abide only as he thinks, wills and acts. These all have "Proper Being," Reality, but it is the "Proper Being," the Reality of the material Entities to which they belong and of which they are the qualities, activities, or phenomena. Though in a sense due to man, they do not inhere in him, do not belong to him, are not his qualities, nor activities; they do not have their "being," their reality *in* him. He has simply directed already existing material substances and forces; without these he could do nothing.

Every object of *art* and *man's device*, every manufactured object, all kinds of machinery, which he has designed and made, consist in material entities; entities which have taken the shapes of which they were capable; and their activities are the activities of material forces such as they are capable of. And all these things have

Realities due to Man

in their *substances*, *qualities* and *forces* a "Proper Being," Reality, which is from the Creator and is *indestructible* except by Him; and even the particular shapes and activities due to man are not necessarily dependent upon him; he may be entirely removed and they still continue indefinitely and even forever. Thus, man may plant an acorn which will grow into an Oak. It owes, in a sense, its being and continuance to him. He might have crushed it with his foot in its first springing up; and at any time, now that it is a great tree, he may cut it down and burn it; or he might have done this at any stage of its growth. Yet the same acorn might have germinated and have grown into an oak without him and he might never have had power to destroy it. This was the case in regard to all forms of vegetation, before the advent of man on Earth.

Again, by the art of cultivation and breeding, man has introduced a great variety of plants and animals. We may suppose, that these particular shapes would never have been without him. Yet were man entirely removed, these could continue for a while, perhaps for a long period under favorable circumstances, to grow and to propagate. Again, men may impress certain marks of a literary character upon soft clay and burn this into hard brick; and such bricks may lie buried, unknown, for eight or ten thousand years, and then be dug up and deciphered, or they might remain the same forever, totally unknown of men and beyond any influence of theirs. A stone of adamantine hardness may assume a shape under the carving of the sculptor and remain unchanged through countless ages, or even forever, whether forgotten, or known of man.

A living animal may be dependent upon man for his being, upon his thought, his care, his will. Man may have bred him and may maintain his life by supplying

“No Object without a Subject”

him with food and drink and all needed attention; and may put an end to him at any time, and yet the living animal has *a being of his own*, “true proper being,”—reality, in the substances and forces which constitute him, and which are indestructible; and, moreover, his present living self might have arisen in the ordinary course of Nature and might receive all essentials for life apart from man altogether.

Such illustrations and all that we have said make it evident that there is such a thing as true, abiding, indestructible “Proper Being,” Reality, both spiritual and material, derived from and upheld by the Creator; and that even the beings which are due to man have their “Proper Being,” a being not *in him*, but in the Entities to which they belong and in which they inhere, and may continue to be were he removed.

It is also evident that the aphorism, or dictum “*No object without a subject*” is untrue, unless this be understood in a particular and very limited sense, a sense in which it is consistent with the plainest kind of pure Realism. Thus the terms may be taken as relative, like husband and wife, parent and child, brother and sister, long and short. In this sense “object” may mean that which is known, and “subject” that which knows. In such a sense every “object” must have a “subject” knowing it; for there can be no act of knowing without something known, and no thing *known* unless there be a subject knowing it. But as thus understood, the aphorism would have no adverse bearing upon Realism, such as it is intended to have.

Again, it may be understood as meaning, that the whole Cosmos and all that it contains, *as it lies in our minds*, or *in our conception* of it, is a product of our thought; it is intelligently apprehended and according to the degree of intelligence which apprehends it. There

The Cosmos a Reality

is for *each individual* no Cosmos but such as he intelligently apprehends, and hence there is a more or less different Cosmos for every one. Here again, however, if properly taken, this understanding of the aphorism is not adverse to the plainest and purest Realism. We apprehend the World intelligently. We know the Cosmos by direct cognition of it and by the construction, from this material, of our conception of it in part and as a whole. If our immediate cognition be very limited and made carelessly, inattentively, and if our intelligence be of a dull, inferior order our Conception will be of a corresponding character, and the world to us would be a very narrow and insignificant one. To one born blind and deaf and dumb the world would be almost unknown. To a little child, born within and never away from the tenement district of a great city, neglected, with mind all untaught and undeveloped, the world is only a small prison-house of brick and mortar and stones. While to a man of high intelligence, of world-wide experience and scientific knowledge, the world is the Cosmos, a Universe of unspeakable Wonder and inexpressible beauty and loveliness. All this, however, has reference to *our thought* of the Cosmos and has no bearing upon the Cosmos itself. It is the same in itself for every individual, the difference in individuals being only in their more or less imperfect apprehension of it, as *it really is*.

The Cosmos is a Realty, it has a true, abiding, indestructible "*Being*" of *its own*, "Proper Being;" all its varied and changing phenomena have "True Proper Being," their "being" consisting in the abiding, indestructible "Proper Being" of the Cosmos, in which they inhere and of which they are the actual manifestations. The Cosmos abides whether men know it or not; and abides the same, whatever be the grade of man's intelligent apprehension of it. And it is to be especially noted

Realism and Idealism Contrasted

that however imperfect the apprehension of it be, or however enlarged such apprehension on the part of men, in so far as they *cognize* the Cosmos they *know* it *as it is* in its own "Proper Being;" and, so far as they construct their intelligent apprehension of it out of *this* material, they have a conception thereof which is true; the concept corresponds with *that which is*, however imperfectly they conceive the Great Reality.

There is a violent contrast between Idealism and Realism.

Idealism is fallible and erring *ratiocination*. Realism is the Infallible Testimony of Consciousness, the origin and foundation of all knowledge. The distinguishing characteristic of Idealism is, that it is a highly wrought system of *Reasoning*, whose mazes it is difficult to tread and whose subtilities are hard to master, Such being its character, it fails to convince ordinary thinkers and is most unreliable. All mere processes of reasoning are extremely liable to flaws in the successive steps of the intricate process, which render the conclusion untrue; and the slightest errors in the premises make all the reasoning null and void. Idealism has all this weakness and falls of its own weight.

In contrast to this Realism reduces mere *reasoning* to a minimum, its great characteristic being, that it is the simple *observation* of *the facts* of *Consciousness*. It permits Consciousness to speak for itself and relies implicitly upon the Truth of its Testimony. It gathers the facts which Consciousness presents and holds them up in their own self-evident truth. Resting firmly upon this sure foundation it stands unmoved, while around and against it, the rising and falling waves of the restless and uncertain sea of Idealistic Reasoning beat themselves into foam.

No process of reasoning, however able and brilliant,

We know that It is

can overthrow the self-evident truths of Consciousness, which we have simply mentioned one after another in giving our exposition of Reality, "True Proper Being," that which *is* with its own Being and is what we know it to be. Realism is Truth. Idealism violates the universal, the well founded, the abiding convictions of men. Realism is the Light which they see, by which they walk without stumbling in their every-day life and in which with one accord they all rejoice and will rejoice.

SECTION V THE INFINITE ABSOLUTE

The consideration of these is here introduced, not because these are Intuitively known, which is impossible, but because the claim has been made that they are thus known and in order to set forth the relation of our Intuitive knowledge to them. The Infinite and the Absolute are one and the same, and we will speak of them as a Unit having the twofold name "The Infinite Absolute."

We know that *it is*.

We know that it must be, because it involves a contradiction to affirm that it is not. We can not affirm our Intuitive knowledge of the Finite without affirming the Being of the Infinite Absolute. The World, spiritual and material, is an effect; it is not eternal. We know this by our immediate cognition of its character. It is ever changing and is the manifestation of power. It must, therefore, have had a beginning and must have had a sufficient cause. This cause is necessarily the "Infinite Absolute." Of this we can form no conception whatever. *As* Infinite, *as* Absolute, it is unknown and can not be known by us; because our thought is confined to the realm of the Finite. Beyond this it is impossible for us to go.

Our knowledge that *it is* does not involve some knowledge of what it is.

We do not know What It is

I may look into a deep cave of impenetrable darkness and know upon the testimony of those, who have explored it that there is something within it, but may be totally ignorant of what this something is. It may be alive, or inanimate, it may be human, animal, or plant, or mineral; it may be solid, plastic, liquid, gaseous, ethereal; it may be natural, or artificial; it may be a fossil, or it may be a painting, or some beautiful, or offensive statuary wrought in marble, metal, wood or clay; it may be thoughts and imagery of the human mind on printed, or written page. It may be something different from any of these, something of which I have no power to conceive, but my ignorance does not prevent me from knowing that, whatever it be, *it is*. Or a barbarian, or a totally unlearned person may look at a beautiful piece of mechanism in full active operation, and may know that there is something from which the motion comes, but be utterly unable to think what it can possibly be; and were he told that it is magnetism, electricity, steam, these would be only names for the mysterious something the "being" of which he doubts not. Thus it is with the Infinite Absolute. I may know that *it is*, without knowing *what* it is; and when told that it is the Infinite Absolute, this is only the name of the Great Unknown, of whose "Being" I am assured.

It has been claimed that Being is not itself an attribute, and that it involves some knowledge of what a thing is to know that it *is*. But Being is as truly an attribute, as any thing else is. An attribute is that which is attributed to, ascribed to, affirmed of, which is a characteristic of. As we attribute to, or affirm of a spirit thought, feeling, volition; and as we attribute to, or affirm of a material thing shape, solidity, motion; so we may equally attribute to, or affirm of spirit and matter Being; and as spirit and matter are characterized by the

Infinite Absolute Being Unknown

things which we have just named, so they have Being as one of their characteristics. Thought, feeling, volition are not apart from that of which they are the attributes; so Being is not apart from that of which it is the attribute.

Here we must be reminded of the imperfection of language. When we say of the Infinite Absolute that it is unknown and unknowable, the language which we use is in a measure at fault. Strictly speaking, we should say that it is unknown and unknowable except in that we know it as having Being. Our knowledge of things is the knowledge of them in their attributes, or characteristics. In knowing, therefore, that the Infinite Absolute has Being, we know this much concerning it. But here again language is at fault, for though we know that The Infinite Absolute has Being, we do not know what Infinite Absolute Being is. This is simply beyond our power of thought.

Yet again language is at fault, for when we say that The Infinite Absolute is unknown and unknowable, we mean that this is so in regard to them *as* Infinite and *as* Absolute. This is beyond *all possibility* of our thought. Thus, I know what wisdom and power are, I know what great wisdom and great power are. I can have the thought of wisdom and power adequate for the production of the material and spiritual universe. I can have thought of wisdom, and of power adequate for the production of a universe vastly superior to that which is, and of an indefinite number of such; but I am utterly unable to think of *Infinite Absolute* wisdom and power. My utmost effort is simply the addition of finite to finite on and on and on, but still ever within the realm of the finite. *What* infinite absolute wisdom and power are, how they differ from, how they agree with, how they stand related to finite wisdom and power is beyond all possibility of thought.

Known Negatively

It is extremely difficult to avoid seeming contradiction in the language used, and to employ exactly the right words and expressions to affirm the truth as to the Infinite the Absolute; to say that *as* Infinite, *as* Absolute they are unknown and unknowable, and yet to say that we have some knowledge of them.

1. Thus, as already pointed out, we know that The Infinite Absolute *is*. This is a true knowledge, because "being" is an attribute of it, and in knowing the attribute, we so far know *it*, though we have no knowledge of *infinite* being, or of the infiniteness of being. Ignorant of this, The Infinite Absolute is to us unknown and unknowable. Here the apparent contradiction is due to the imperfect character of language.

2. We have a negative knowledge of the Infinite Absolute, that is we know what it is not. But here again, language fails, for this *knowledge* is the proof and the declaration, that we do *not know*.

The thought of the Infinite Absolute very readily arises. It is not a mysterious native endowment of the mind revealing it. It springs from our knowledge of the Finite and the Conditioned. The terms are correlative, like long and short, wide and narrow, husband and wife, parent and child. We know the finite, and the conditioned, the correlatives of these are the Infinite, the Absolute. Having the thought of the one we have the thought of the other. In thinking of the finite we think of the infinite, in thinking of the conditioned we think of the absolute. The terms are the positive and the negative. The finite and the conditioned are the positive, we have a knowledge of them; but in having the thought of the Infinite, the Absolute, we have only that which is negative. The Infinite is that which *is not* finite; the Absolute is that which *is not* conditioned. Thus Infinite Being *is not* finite being; infinite wisdom *is not* finite

Known in Its Effects

wisdom; Eternity *is not* Time; Infinitude *is not* Space; infinite power *is not* finite power; infinite, absolute Will *is not* finite will.

Here again, because of the weakness of language, the known and the unknown seem to unite; we seem to affirm and deny the same thing. We affirm, that we know what finite being, wisdom, power, will are, and that we *know* that infinite, absolute being, wisdom, power, will are not what we know finite being, wisdom, power, will to be, and we *know* that Eternity and Infinitude are not what Time and Space are, and yet the Infinite, the Absolute are *unknown*. The explanation is that knowledge of the Infinite, the Absolute is only negative. We know what they *are not*; we do not know what *they are*. The Infinite Absolute is unknown and unknowable.

3. We know The Infinite Absolute in its effects produced, or so far as it has revealed itself. This is the way in which we know all things else. We know the Soul in knowing the effects which it produces, its thoughts, feelings, volitions. We know material things in knowing the effects which they produce, the varied phenomena of the Cosmos. Thus also we know the Infinite Absolute, by knowing the effects which it produces, these are the things of the spiritual and the material universe. Unable of ourselves to rise up into its realm and know the "Infinite Absolute," we, confined within the finite realm, know it with the knowledge which it has imparted to us, which knowledge is and must be a *finite* one.

Thus we know that the Infinite Absolute *is*, and we know that within it is that which is the adequate Cause of the spiritual and material universe. Being such *adequate* cause, it cannot be in any respect inferior, but must be fully equal to that of which it is the cause. It

Known Supernaturally

must be fully equal to the wisdom and power seen in material things; and as in us there are thought, feeling, will, living personality, so also there must be within the Infinite Absolute that which is in the fullest degree equal to these; but beyond *this*, our knowledge does not go, except negatively.

If we are living Persons, a living Personality must be within the Infinite Absolute, though *what* Infinite Absolute Personality is must be unknown and unknowable. How it stands related to us, how far it agrees with, or differs from us we can in no wise think. Our own personality is a Unit. We cannot affirm that such is the case with the Infinite Absolute Personality, or whether it be a "One in Three and Three in One," or something else entirely different. And if it be a "One in Three and Three in One," we can by no means *think what this is*, nor affirm whether it is possible, or impossible; all our thought is restricted to that which is finite.

All the above is a true *knowledge* which we have of the Infinite Absolute, yet it is a knowledge which has been *brought down from the infinite into the finite* and expressed in terms of the finite, leaving us as *ignorant as we were before* of the Infinite Absolute *as such*. This knowledge is too wonderful for us, it is high, we cannot attain unto it.

4. We know the Infinite Absolute so far as it has revealed itself *supernaturally*. That there is such a supernatural, and written Revelation, all who accept Christianity are fully assured. By this revelation we know the Infinite Absolute with a true knowledge; but here again that which has been made known has been *brought down from the infinite absolute to the finite* and *expressed in the terms thereof*.

The Revelation is thoroughly anthropomorphological and negative. It is like unto ourselves. The concep-

Known through the Incarnation

tion given us of it is as of Our Father, Friend, Companion, Creator and Upholder of all intelligent beings and of all things; Personality is within it, it is a Spirit even as we are. Every thing is in the terms of human thought and human speech. Yet the Personality is *not* such as ours; it is a "One in Three and a Three in One;" the Infinite thoughts and ways *are not* as our thoughts and ways; the Infinite One is unsearchable, past finding out; He inhabits Eternity, while we are in Time; He is The Invisible, whom no one hath seen and whom no one can see; *He is the Unknown and the Unknowable*. It is beyond the range of our thought to know how that which has been revealed after the manner of men and in the terms of human speech, corresponds with, or stands related to, how far it agrees with, or differs from the Infinite Absolute. We only know that the *finite* thought, which has been given to us, is in some sense *real and true*.

5. We still further have a knowledge of the Infinite Absolute through the Incarnation. God became Man. Herein is the most impenetrable of all Mysteries. The Fact we know. We cannot understand, nor explain, nor illustrate it. It is absolutely unparalleled. It is unique. We can neither affirm nor deny its possibility, or impossibility. We can have no thought of how the Divine and the Human, the Infinite and the Finite are united, of how and why it is that he who hath seen and known Christ, has *seen and known God*. We only know that in Jesus Christ the Infinite Absolute has *entered into* our finite realm in a mysterious and peculiar way, and has given us a *true knowledge* of itself; true although this knowledge is altogether *finite*, although it is according to human thought and is expressed in terms of human speech, and although the Infinite Absolute as such remains unknown and unknowable.

It is Unthinkable

The only illustration and suggestion of this which we can give is that, as because of the vital union of the Soul and Body, we in looking upon the body *see* the Soul, although the Soul remains unseen and invisible, so because of the living union of the Divine and Human in Christ, we in knowing Christ know the Infinite Absolute, although the Infinite Absolute, as such, remains unknown and unknowable. As in Man the Spiritual has a *physical* manifestation which alone is that which we *see*; so in Christ the Infinite Absolute has a *finite* manifestation, which is all that we know and can know.

Or, again, as because of the union of the Divine and the Human, the *physical* sufferings of Christ were the sufferings of the Infinite Absolute, so because of the union of the Divine and the Human in Christ, our knowledge of *Christ* is the knowledge of the Infinite Absolute.

God became Man *in order that* He might suffer; God became Man *in order that* in knowing Christ we might know God.

God, the Infinite Absolute, *cannot suffer*; God, the Infinite Absolute, *is unknown and unknowable*.

An all important consideration must here be mentioned. When it is said that the Infinite Absolute is unknown and unknowable, it is not meant that our knowledge is simply *inadequate*, as though all that is needed is that it be enlarged. The meaning is that the Infinite Absolute is *unthinkable*.

For example, Eternity is not simply Time infinitely extended into the future and backward into the past. This would not be infinite, for there is a division into two parts, each of which has a beginning from the present; the one from the present onward, the other from the present backward. Moreover, it would not be absolute but conditioned, the conditions being the past, the

Not Simply Boundlessness

present and the future, and the changing relation of these to one another. Still further, Eternity is not *Time*, for Time is finite, successive, has its beginning and always an end, which is ever lengthening out, and has its divisions and subdivisions; while Eternity is the Infinite Absolute; it is not successive, has neither beginning nor end and is without any divisions whatever, it is *entirely free from past, present and future*. We know not what it is, but we know that it *is not* Time; it is *un-thinkable*.

Another example. Infinite Absolute Being is not simply Being infinitely extended. Our being has its beginning and its lengthening out end, is dependent and successive. Infinite Absolute Being *is not* such as ours. It is self-existent, independent, without beginning, without end, without succession. We do not know what it is, but it is not such as ours; *it is unthinkable*. Again, Infinite Absolute Wisdom is not simply what we call Wisdom *extended boundlessly*. Our Wisdom has its origin and foundation in the immediate cognition of created and finite realities, and is constructed out of them by processes of discursive reasoning; we cannot *originate any thing*; it has its beginning, its advancement, its present lengthening out ending. Infinite Absolute Wisdom has no beginning, no advancement, no lengthened out ending, is not a construction built up from and founded upon the immediate cognition of finite realities by process of discursive reasoning, but is itself the *origin* of all these and of all possible realities. Knowing as we do what our Wisdom is, we do not know *what* Infinite Absolute Wisdom is; *it is not* what ours is. The activities and operations of the Infinite Absolute Intelligence *are for us unthinkable*.

Within the realm of the Infinite Absolute our thought is at zero.

What we have said shows conclusively, that the Infinite Absolute differs from the Finite *radically, essentially* and is not simply the Finite with all limitations removed. The difference is so great that, while the latter is known and knowable, the former lies entirely beyond the utmost reach of our knowledge.

All that we have said is simple, plain; it is easily understood and is self-evidently true. The difficulty in regard to the Infinite Absolute arises from wrong statement and from disregard of the fact that we are strictly confined within the realm of the Finite and from the consequent effort to attain the unattainable. The proper statement is, that we know that the Infinite Absolute is; that we know it negatively, that it *is not* such as is the Finite, differing *radically, essentially* from it; that we know it, as it has manifested itself in Nature, supernaturally and in the Incarnation; yet we know not what the Infinite the Absolute *is*, and the only knowledge which we can have of the Infinite Absolute is finite expressed in terms of human thought and speech.

That we might know Him, God *became* Man. Christ is Immanuel, God with us. We know Christ, around and upon Him our thoughts cluster and rest beautifully, blessedly, but in the very effort to rise higher and enter into the Infinite Absolute, thought is paralyzed, it is at zero.

A Partial Knowledge Impossible.

The popular thought is that, though we cannot know "The Infinite" to perfection, we may have a partial knowledge of it. *This, however, is impossible.* The knowledge which we have may be expressed thus. We know *the One* who is Infinite, but we do not and cannot know *The Infinite*.

We cannot be said to have a *partial* knowledge of the Infinite.

Partial Knowledge Why Impossible

1. We have such knowledge of the material world, because it is finite, and were our knowledge of it increased it would embrace the whole. But no knowledge which we might have of the Infinite could be so enlarged, as to embrace the Infinite itself. However much enlarged it would be *as inadequate* as it was at the beginning; we would *no more* know the Infinite than at the outset. It is impossible to make an approach towards the Infinite; in reference to it, our highest thought is necessarily infinitely *less than zero*.

2. The finite thought, which we have, does not stand related to the Infinite as a part stands related to the whole. The Infinite is an indivisible Unit. Our conception is only of *The One* who is infinite, but not of the "Infinite." We cannot know God except as *He comes forth from His Infinity*, enters into our finite realm, and *adapts* Himself to our finite ability. He comes to us *in all the fulness* of His undivided and indivisible Infinite Being, but *speaking and acting as a man*. We thus think of Him, and our conception is true; because this is that which He has Himself given us and is the conception of *the One* who is infinite, but is neither in whole nor in part, a conception of The Infinite. The relation in which it stands to the Infinite is that of being other than and different from it. Thus, as we have already pointed out, finite being, wisdom, power, and time and space are radically and essentially different from the infinite being, wisdom, power and from Eternity and Infinity.

3. Being strictly confined within our own finite realm, we cannot enter into the Infinite and have the least thought of it.

4. It is unquestionably true, that the Infinite is for us unknown and unknowable. The only question is can the One who is Infinite make a finite world, and finite intelligences, such as we are, and give a finite revelation

Our Highest Thought of God

of Himself? That this is impossible would be absurd for us to affirm of the Infinite One, and that He *has done* this we know beyond all question; for the world *is*, and we *are*, and the world and ourselves are the finite revelation which He has given of Himself. As we are the crowning work of His hands, within the realm of our knowledge, we cannot rise higher in our conception of the Infinite than thus enabled.

Our highest thought of God is the thought of Him as like unto ourselves.

How this finite revelation is possible, and how it stands related to the "Infinite" of which it is the manifestation, we cannot think. It is as impenetrable a mystery as is the Infinity itself. Even the supernatural revelation, given in the Bible, does not introduce us *into* the Infinite. It is a finite addition to the finite knowledge of it given in Nature; its language and thoughts are after the manner of men; otherwise, it would be unintelligible. Its mysteries concerning the Infinite completely baffle and bewilder all human thought, they are received by faith in the Divine Testimony, and are, and can be accepted as possible and true by us, as intelligent beings, because thus revealed and because they belong to the realm of the Infinite where human reason is powerless; otherwise they would of necessity be rejected as contradictory and impossible. These have, foolishly, been persistently rejected as being of this character by men of eminent intellectual power and culture. Professing themselves, and with good reason, to be advanced thinkers and above their fellows in intelligence, they have made themselves absurd by their own disregard of the *fundamental* and *inexorable rule of all human reason*, "that it be confined strictly to the finite," and of the fact that hence we may accept as true whatever may be revealed as to the Infinite, and *must not reject it* because

God, the Invisible Seen in Christ

to us it is *contradictory*.—To do this is unreasonable. Such men as these have rejected the Trinity, the Incarnation, Foreordination, Election, Eternal Punishment by a God of Love, the necessity for atonement for the Divine pardon of sinners, the resurrection, etc., and they have claimed to take some knowledge and form, some conception of the Infinite, and have had all manner of subtilties in regard to it, because they do not remember that human thought is *powerless* beyond the realm of the finite.

What we have said, as to our inability to know the Infinite even in part, is evidently in accord with the Divine Revelation, thus—When Moses desired to *see* God, all that was granted to him was to see, not His face, that is not God the Infinite, but a mere glance of Him *after He had passed by and had turned His back upon him*. It is written “No man hath seen God at any time. The Only Begotten Son, which is in the bosom of the Father, He hath declared Him.” According to Divine Revelation, God is the *Invisible One*, that is the Unknowable One, who is *seen* of angels and of men only as He is revealed in Christ, God manifested in the flesh. The word *see* means to *know the reality itself*. The *highest and fullest* knowledge of God given to created intelligences is the knowledge of him in Christ. All other knowledge given to angels and to men is lower, not higher than this; but this knowledge is thoroughly finite.

When Christ was on Earth men, friends and foes alike, in seeing and hearing Him, the Man Jesus, saw and heard the One who was and is God, but all that which was visible and audible was Christ’s *bodily presence* and His *human voice*; it was the Man Jesus who was seen and heard. In Christ the *human* was the manifestation of the Divine, but was not the Divine, nor a part of it.

Real and True but only of the Finite

So with our finite knowledge of God we know *the One* who is Infinite, but all that we know is finite; the manifestation of the Infinite in some mysterious way, but not the knowledge of the Infinite, not even in part.

SECTION VI THE INTUITION OF GOD

It is an utter impossibility for us to have an Intuition of the Infinite Absolute. We would need to be ourselves "Infinite" for this. Though He were present to the Soul, the finite Soul could not directly cognize the Infinite Absolute. To say that we did so *partially* and only partially is to affirm that we cannot cognize this; for a partial cognizance would be infinitely less than the reality, which is zero. There are certain senses, however, in which it may be said that we have an Intuition of God, who is the Infinite Absolute. But it will be seen, that this is something very different from that which it is regarded as being in the minds of many.

The great bane of metaphysicians, the fruitful source of intricate obscurities, subtilties, inconsistencies, difficulties, contradictions and errors, has ever been the vain strife, as we have been pointing out, after the impossible, the futile effort to penetrate the realm of the Infinite Absolute. The only possibility for clearness and for Truth is that we confine ourselves strictly within the "Finite," our proper and only realm for thought and knowledge. In speaking of our Intuition of God, we must restrict our thought to the Finite. It will appear that the Intuition is only of that which is Finite. Our knowledge, however, of God is *real* and *true*, because, although we do not know the Infinite Absolute, we know *the One*, who is in Himself the Infinite Absolute.

When Christ lived on earth men saw and heard and handled Him. In so doing they *directly cognized* Him. This was an Intuition of God. But it was strictly finite,

Theophanies, Works, Impulses in the Soul

as much so as when, in like manner, they directly cognized their fellow-men. In thus cognizing Christ, though they cognized Christ's bodily presence only, they cognized Him who is God. When God spoke to Moses by an audible voice from the midst of the shining light in the bush, Moses had an Intuition of God, but the direct cognizance was only of the physical light and sound.

Again, men have an Intuition of God in having a direct cognizance of *His works*. It is by Intuition that we take the knowledge of the realities of the Material World, but these, being the creatures of God, are a revelation of Him. In knowing these things we know *Him* who is the Infinite, the Absolute, but the Intuition is only of His finite works. We have a still further and a higher Intuition of God by the direct cognizance of our spiritual selves as His workmanship; but here again the Intuition is thoroughly finite and of the finite.

There is yet another way in which we may be said to have an Intuition of God. This, however, cannot be positively affirmed scientifically. We believe in it as *an actual reality*, but the complete scientific proof of the fact may be wanting. There is no doubt as to the fact itself, but only as to the *proof* of its real character. There are certain impulses, promptings, directions and guidance of thought, emotions, restraints, longings and aspirations within the Soul which are due to the direct action of the Holy Spirit. In so far as this is their true character, by our direct cognition of them we have an Intuition of God; but this is a finite knowledge of these finite things.

It must be distinctly noted, however, that the Intuition is only of these things within the Soul, but not of their character *as due* to the Spirit of God. We cannot distinguish between these and similar ones arising from ourselves. Hence these, although in fact a true Intuition of God, cannot be referred to, to account for the origin and

Soul=Thirst for God

the maintenance of the thought of God within men. Yet, as a fact, it may be that it ever has had much to do with both of these. If there have ever been certain impulses, emotions, with direction, but not the *imparting* of thought which is never the case, within the Souls of men due to the Divine Spirit, men, though they knew not the source whence these come, may thereby have ever been lifted up Godward. This, however, has varied in different men according to the various degrees in which the Divine Spirit has acted upon them.

This may be the true character and account of that which has made such a deep impression upon the mind of many of the most noted philosophers. They speak of man's religious nature or instinct, constitutional tendency Godward, religious appetencies, a native soul-thirst for God, a want, a need, a search of the Soul for an adequate object in which to rest. All this is mysterious, mystic, uncertain, unaccounted for, but it becomes perfectly simple and plain, if we be allowed to refer these things to the influence of the Divine Spirit dwelling with or within the human soul. This we believe to be in a large measure true, yet it is certainly the introduction of the supernatural, and hence may be regarded as beyond the province of Science. But the fact mentioned must not be lost sight of, that this Intuition of God is only the intuition of certain finite things within the Soul.

Here we might go a step further beyond Science and towards the Supernatural, and speak of God's Immanence in Nature and His Living Presence with, or within the Soul of Man.

We have already pointed out, that for the Intuitive Perception of external things they must be properly presented by the organs of Perception, and, also, that for the Intuitive Perception of the things of Self these must also be properly presented. It may be that were the

God's Immanence in Nature

Soul of another, in some way, *properly presented to us* within, we might have an Intuitive Perception of such a Soul so far as it was thus presented. This is not altogether a mere supposition. There are certain indications of it as a reality. Some have claimed that simply by looking fixedly and with a purpose at a person, who is unconscious of their presence, they have power to so influence him that he will become conscious of and turn and look towards them. There are also supreme moments of intense rapture, when two kindred Souls are looking into one another's eyes and seem to see into the very depths of one another's being, Soul beholding Soul.

It would at least seem, that there is no inherent impossibility of one Soul knowing another by Intuitive Perception, if the latter were properly presented to it. Hence, also, it is allowable to suppose the *possibility* of our having such a Perception of God were He *properly presented to us for this purpose*; but the question is, can this be and in what sense?

In these days the doctrine of the Divine Immanence is becoming more widespread and is taking a firmer hold upon the minds of men in general. But this includes the presence of God with, or within the Soul of man. This is the old, old Truth of our religion, laid down in the Old Testament and beautifully enforced in the New, and has ever been the life and the joy of the Christian. God's promise is to dwell with His people; Christ says, "Lo I am with you alway;" Christ lives with the Christian; the Christian lives in intimate fellowship with God. Strange that this old Truth is, in these days, presented as a new Truth of the Age!

If God be thus present with, or within the Soul of man, holding fellowship with him, if he be a Christian, may He so present Himself that we may directly cognize Him?

In reply, it may be said, that it certainly is *not an*

God Present but Invisible

actuality. It may readily be, that God's presence and fellowship with His people find their present fulfilment, as far as their consciousness is concerned, in the emotions, impulses, etc., with which He inspires them. *Still further* it is certainly true that God does not to any practical degree so present Himself to the Soul, that it may directly cognize Him. Men, as is well known, have no such consciousness. So far from "seeing" God, even in the most ecstatic moments, they now behold Him by faith and look forward to some kind of *vision* of Him in the world beyond. Even if in moments of high ecstasy, it be claimed, that there may be a direct cognizance of God, such instances are of extremest rarity and the Intuition, which is claimed to exist, reveals nothing that is not otherwise known and the experience may be explained as in reality only a full assurance of that which is known already. In the *next place*, it is also certainly true that, even if there be any direct cognizance of God by the Soul, it is thoroughly anthropomorphic and finite; it is certain that this must be the nature of the presentation, if there be any such, of God to the Soul for its cognition. The unquestionable fact is that men have no other knowledge of God.

The Infinite Absolute Personal God may in virtue of His Immanence be present to the Soul in the complete fulness of His Being, but He is essentially the Invisible One. This is the positive affirmation of Scripture and the assured Truth of Science, except as He gives in some way a suitable finite presentation of Himself. This is true in reference to angels as well as to human souls. Hence the Incarnation of God in Christ. God became Incarnate that He *might be seen* of angels and of men.

Thus the Truth stands as to the *Vision of God*, who is present within the Soul. We cannot deny the *possibility* of such Intuition, *provided* God gives a suitable, finite,

Vision of The One who is Infinite

presentation of Himself; but men have no consciousness of seeing God except by faith; nothing has ever been known of God by Intuition of His Presence within the Soul, even if there be such Intuition, which is not already known otherwise; and we have no knowledge of God that is not finite and anthropomorphic; if God ever has so presented Himself to the human Soul that it may directly cognize Him, He has done this in some finite manner according to the fashion, or likeness of the human Soul itself. It must be noted here, that we are now speaking of that, which is supernatural.

To sum up what we have said—It is impossible for the human Soul to directly cognize the Infinite, the Absolute; the only Intuition which we can have is of *the One* who is the Infinite, the Absolute, and is an Intuition only of His works in Nature; of ourselves as His workmanship, and of certain states and activities within the Soul which are due to the Divine Spirit; and an Intuition of Him in the finite, anthropomorphic presentations of Himself which He may give us, the only known instances of which are the Theophanies of the Holy Scriptures and especially Jesus Christ.

SECTION VII LIFE

We have an Intuitive Perception of Life.

Life is one of the most familiar of all things and our conception of it is clear and definite. We know what it is for plants and animals and ourselves to live, and what it is for living things to die. There is no obscurity in the thought of Immortality; a little child readily apprehends what is meant by the continued *Life* of the Soul after the body is *dead*; and there is no difficulty in thinking of "The Living God," the Author and Giver of Life.

Yet Life is the *Great Enigma*, though unnecessarily such. In the minds of men it has been invested with

"That Which Is" Lives

the deepest mystery, into which they have endeavored in vain to penetrate. The whole difficulty lies in a great and obvious mistake, that of supposing that we can go below and look beneath manifested facts, fundamental truths intuitively known. All Science is constructed out of *observed facts*, as truly as a marble palace is built out of blocks of marble. Its primary work is to gather the facts; this is its starting point, to which there is for it nothing a priori, except the mystery of the *creation* of finite things endowed with their forces and activities, and the Self-Existence of the Infinite. This great mystery rests upon all things, upon Life in no degree more than upon every thing else. We know Life just as well as we know Substance, Being, Solidity, Extension, Magnetism, Electricity, Gravitation, Chemical and Mechanical Forces. We understand these fundamental things, simply by discovering and observing the facts presented by them. In like manner and equally we understand Life and penetrate the deeper into it according as we learn the facts concerning it, or, in other words, its manifestations, or phenomena. To look beneath *these* and ask "What is Life" is as impossible as to look beneath the facts of Electricity and ask "What Electricity is?"

As, therefore, there is no *special* mystery about Life, we may readily think and speak of it as we intuitively know it. In briefest fashion, it may be said to be the same as "Being." Not "Being" in the abstract, nor as a separate quality, but in the concrete, "The thing in being," the thing existing—"That which *is* lives." It might be defined "Actual Being," or "Concrete Being." Accordingly, every individual thing, that is every "Entity" lives, has life, is itself Life. It lives as long as it *is* an Entity in its unimpaired integrity. It dies by destruction, by *ceasing to be*. A little consideration will show that this is obviously the truth.

“Inanimate Things” have Life

All so-called Inanimate Objects have *their* Life, as truly as the things which are usually designated as “*living*.” There is no need of changing established distinctions and phraseology, as we shall point out, but in maintaining these it must not be denied, that the so-called inanimate, material world is truly alive. By creative power it was brought into being and endowed with all its properties; while it continues to be *it lives*, should it be destroyed it dies. A drop of Water lives as long as it exists; should the union of the oxygen and hydrogen be broken and they become separate gases the *water*, with its peculiar properties, dies, it no longer *is*. A piece of charcoal lives while it remains as such with its qualities, but it ceases to be when by fire it becomes carbonic acid gas and a few ashes; the *charcoal* is dead, it has ceased to be. Thus of everything in Nature and in Art also. A fine piece of marble statuary *lives* as long as it continues; if ground to powder, or burnt into shapeless lime it is dead, for it no longer exists. Thus also a piece of mechanism, as a locomotive engine, lives as long as it lasts, but when destroyed it dies. There is more truth in certain phrases used in reference to all these things, than that of a mere figure of speech. It is often said, for example, of a steamship, or of a locomotive, it has a life of so many years. Astronomers speak of living and of dead worlds; they call our Moon *dead*, it has run its course, its activities have ended; it has ceased to be the world which it once was. In Art, the expression “Still-Life” is frequently employed and also “Life-Size” when speaking of paintings, models and drawings of so-called inanimate things. These things according to the definition of Life which we have given are truly alive.

The definition applies to *Vegetable* Life. A Plant lives as long as it exists, and dies by ceasing to be. Science has unfolded in a marvellous way the wonders of

Plants Live by Being What They are

plant activity. This is our knowledge of its *Life*. The Vegetable cell is a *created*, material construction, endowed with its own peculiar forces, by which all its organic processes are performed. The activities of the mere mineral world *cannot construct* the vegetable cell and endow it with its peculiar forces. These organic forces inhere in the "construction" and *in it alone* and are derived from original endowment by the Creator, just as mere mineral forces inhere in inorganic things by virtue of their original endowment with them by the Creator.

Hence it is that, while the plant cell continues in its essential unimpaired integrity it *lives*, but if it be disintegrated it dies; it ceases to be, its original, inherent forces are irreparably lost, they no longer *are*.

The case is precisely the same as that of the drop of Water. This has its peculiar, inherent forces and activities; it may be ice, a fluid, or a vapor, each with its peculiar properties. But if resolved into oxygen and hydrogen gases all these vanish away, they no longer are. In the one case, we have the constructed cell and its original, inherent, peculiar, forces and activities; in the other, we have the drop of Water, with its peculiar inherent, forces; and life and death, in both cases alike, are simply the "being" and "not being" in unimpaired, essential integrity, of the thing which is or is not. The Plant does not differ from the "mineral" by having a mysterious something which is "Life," which the mineral has not and which goes forth from it when it dies. They differ simply in their own characters; the one is organic, with its peculiar forces; the other is inorganic with the forces peculiar to itself. They both *live*, as long as they continue and die by ceasing to be.

It is in perfect accord with this view of Plant Life, that seeds and cuttings have a prolonged vitality in a

Dormant Life**Vital Force**

dormant state, some seed even for thousands of years; and some plants may be withered, hard and dry, apparently dead and yet spring forth into activity and growth. If the cell in its essential structure be preserved it retains its peculiar, inherent forces from which it is inseparable, just as the inorganic mineral objects, such as gold, silver, retain those which belong to them, and when afforded light, heat and moisture these forces become active and perform their wonderful processes of growth, flowering, fruitage, reproduction. The fact of this prolonged, deeply dormant, or apparently thoroughly dead state of the plant, has recently been scientifically examined and emphasized.

What we have said holds good whatever be the nature of Vital force. That there is vital force is assuredly true. There are vital phenomena and these necessarily require force, or forces by which they are produced. This force is in some true sense resident within and connected with the organic cell. While the cell with its forces continues it lives, but if it be disintegrated and its forces dissipated it dies, it no longer is. Hence also its life may be dormant for an indefinite period, because its forces may be at the rest of equilibrium with one another, or with those which are external. Thus a seed may be dormant, because its forces are in equilibrium with the resistance due to dryness and coolness. When given moisture and heat the equilibrium is destroyed and the cell forces start into activity and into co-operation with those external to it.

There are three suppositions which may be and which have been more or less distinctly made as to the nature of vital force. The one is that it is a *totally* New Force, created and implanted within the organic cell by act of the Creator. This, however, would necessitate a direct divine act of creation, not only for the original cell,

1 A New Force

2 A Union

3 Co-operation

but for every cell which has ever been or will be formed and is unphilosophical because needless. Another supposition is, that the vital force is new in a *secondary sense* of the term, that is a force formed by the peculiar Union of certain material forces, and existing only as resident within the organic cell. The primordial cell was from the direct act of divine creation, both as a structure and as endowed with this new force, the peculiar *union* of other forces. By the process of growth and of reproduction the organic structure with its endowment of this force is continually multiplied and perpetuated.

The third supposition is, that the Vital Force is the *resultant* of the Peculiar *Co-operation* of material forces within the cell with one another and with external forces. The primordial cell both in its structure and with this *peculiar* co-operation of material forces within it, was by the direct act of Divine creation, and by growth and reproduction is continually multiplied and perpetuated, deriving material and forces from food supply. This is the view which has most in its favor and which we adopt as presenting our present extent of knowledge. It may be regarded as including all that might be gained by the second supposition, and as being hardly, if at all, distinguishable from it. A *union* of forces forming a new force must to our mind be practically the same as a peculiar, mysterious, inexplicable and most intimate and wonderful co-operation of forces. Moreover, it is evident that the forces resident within the organic cell co-operate with those which are external to it, notably with moisture, heat and light; these are not to be regarded as *stimulants*, exciting the germ forces into activity, but as forces overthrowing their equilibrium within the dormant cell and *co-operating* with them.

It thus appears that the vital activities and phenomena are due to the co-operation of the *internal* and external

Vitality in the Organic Germ

forces, but that the *vital* characteristic belongs to the organic structure and its resident forces. Moisture, heat and light are essential as co-operating forces, yet in and of themselves they have no *vital* power. They may co-operate with one another and with other forces anywhere and everywhere, but can never produce vital phenomena, except as they co-operate with the forces of the living cell; acting on the cell without such co-operation they produce decay and destruction. The *Vitality* is due to the organic germ. Vitality is its peculiar property. It is a structure with its endowment of forces in unique co-operation with one another and with those which are external, a structure and co-operation possible only *within* the cell and springing only from its self-reproduction.

This strange affirmation has been made that the organic cell has no forces, is simply a mechanical structure, giving direction to external forces—"The germ supplies not the force but the directive agency," that it consequently has no *life* in itself, but *becomes* alive when external forces act upon it and are by it directed to the production of vital phenomena; and that *Dormant Vitality* is impossible and absurd. This statement is confused and objectionable. It disregards the fact that the germ has directive agency only because of its own resident *forces*, and that, as these are the determining *vital* factor, the *Vitality* belongs to them; the external forces such as moisture, heat, light have in and of themselves no vital power, but only as directed by the vital forces of the germ through co-operation with them, just as "gravity" has in itself no *time-keeping* power; in a clock the *time-keeping* is due not to the gravity supplied by the weights, but to the resident and co-operating *forces* of the clock mechanism. For long ages moisture, heat, light, etc., were in the world, but there was no *life*.

Life Known in Its Phenomena

This began only when the organic cell with *its* forces, made by divine creative act from existing material and forces, was introduced. As time-keeping is not in gravity but in the clock and its forces, so *Vitality* is not in moisture, heat, light, etc., but in the germ and its forces. It is, therefore, wrong to deny *life* to the germ and to affirm that there is no such thing as Dormant Vitality. The Germ is dormant when its forces are at the rest of equilibrium with one another, or with those which are external.

It has been maintained that the tendency of the organic structure is to decay and that the decay evolves vital force. Were this so there could be no growth and reproduction, for the amount of force thus evolved would suffice only for the repair of the damage done by decay. If decay be a necessary factor in the life process, it may act possibly by overthrowing the equilibrium of the germ forces and thus starting them into activity, or, perhaps the decay may, as has been suggested, so act upon the food supply as to liberate force from it which will co-operate with the resident germ forces.

From what we have thus said, this is evidently true, there is resident within the organic structure a force, which by co-operation with external forces produces the phenomena of Life; we *know it* by knowing its phenomena, its facts, as well as we know any thing else, thus we know organic Life; the *Cell lives by being what it is*, it lives as long as its structure and forces continue, and dies by these ceasing to be.

The same Definition applies to Animal Life. The essential character of the animal is the union of a material organism with an indwelling spirit. There is no such thing as "spontaneous generation." The animal, a spirit and a body in union, is a created being with original endowment of its peculiar organic and spiritual powers.

The "Life" of Animals, Men, Angels,

As long as *this* created being continues in its unimpaired, essential integrity it lives, and dies only by ceasing to be. Our knowledge of animal *life* is our knowledge of the organic structure, the indwelling soul, the union of these and the peculiar organic and spiritual powers inherent in the animal. The *peculiar* forces inhere in and are inseparable from the animal, formed of soul and body in union, and are found nowhere else, and they are or are not, according as the animal exists unimpaired or ceases to be.

Hence it is that animal life may possibly be dormant and even for long periods. Fish and reptiles may be frozen hard and remain thus for an indefinite time and come to activity again upon being thawed out. Frogs, it is claimed, have been found embedded in solid stone where they have been imprisoned for thousands of years, and have started into active life upon being released from their imprisonment. This is, because the structure of these creatures, as an organism in union with an indwelling spirit, has been preserved in its essential integrity with the original endowment of its powers. The hibernation of bears and other animals afford illustrations of the same thing.

As the distinctive and essential characteristic of animal life is the union of a spirit and a body, the life of the animal is distinctly the continuation of that union; its death is the dissolution of it. When this union is broken *the animal* ceases to be.

Again, the Definition is true of human Life, both of the Life of man incarnate and of him as a disembodied Spirit. As long as the union of Soul and Body abides the man lives and the moment this union is dissolved death ensues, man as an *incarnate being* no longer is. There is no going forth of a mysterious something, "Life;" there is simply the "ceasing to be" of that which was. The union of soul and body is no more, all the

God is "Their Being What they are"

peculiar activities resulting from it come to an end; the body rapidly disintegrates, its *peculiar* forces vanish, for they have their being only in the animal organism. The Soul of Man is a created Being with endowment of inherent powers of thought, emotion, will. His Life consists in "*his being such an one*," and his death is only in *annihilation*. While I have my being I live. Precisely the same thing is true of Angelic Life. Angels live by being what they are.

This is also true of the Life of God. He lives because He was and is and evermore shall be. No other conception of *His Life* is possible. He also is the Author and Giver of all Life, because He has created all things and all intelligent creatures, with the endowment of all their inherent peculiar powers, and they all live because they have their *being* in Him; their *Life* is *their being what they are*.

The Conception of Life which we have thus given, is perfectly simple, clear, definite and most readily apprehended. Life is "*the thing in being*."

According to this, as already pointed out, even so called inanimate things are alive. This will be better appreciated when the true character of the material world is considered. Material things are not thrown together at random and independently of one another. All things are themselves combinations and are systematically bound together in united wholes. The World is not Chaos, but an intricate Cosmos. Every sun is a built up world with its own activities and processes; they form systems of worlds and these are formed together in One Great Universe. Our Sun, with its planets, is a system of its own, a closely united whole made up of many and varied interacting members. It had its beginning, or *birth*; it has had a gradual development, or growth, is going onward to an end, when it

The Mineral World an Organic Unit

will cease to be. Our Earth is an organized Unit. It is a globe, revolving on its axis with its special inclination giving it days and nights and seasons. It has its orderly distribution of continents and seas, with mountains and plains, water courses and ocean currents. It has its atmosphere with systematic circulation of winds, the forming and moving of clouds and rains and snows. All things in unceasing activity, working together for one common end. It had its *birth*, it has evolved from the original Nebula as a bird evolves from the egg, its processes are carried onward, it is maturing, growing old, moving ever steadily on to extinction, to death.

This inadequate presentation of the true character of the World is a vivid picture of Life and its activities, expressed most naturally, and readily in the terms thereof—birth, evolution, development, members, organization, circulation, processes, growth, maturing, endless variations, age, death. Still further, the various things with which we are acquainted are in large measure *structures* produced by material forces and activities. The Rocks are composite constructions, crystalline, laminated, etc.; they had their beginning and development, and are exposed to and suffer disintegration, destruction, death. Sands, earths, water, air are composite formations, having *as such* their origin, development, activities, decomposition, extinction, death. The elemental substances themselves, in their present forms, had their *origin* as existing units and as such have their *peculiar* properties and activities, and may cease to be; they are born, they live, they die.

Thus the “mineral” world, in its true character, approaches so near to what is called the organic and animated world, that the two seem to coalesce and the distinction between them as inorganic and organic and as inanimate and animate disappears. They are both

The Great Mystery of "Life"

organic, living structures endowed each with its *peculiar* forces and activities. The plant differs from these other material things, not in having an unknown, mysterious something which is "Life," but in being a created structure of a higher, and more delicate character, a thing which the mineral world is incapable of producing, endowed with powers and activities, inherent within it and found in nothing which is of a different and lower grade of things. Hence, as far as mere Life is concerned, they are both truly alive.

Yet the distinction between organic and inorganic, and between animate and inanimate is exceedingly convenient and expresses an important Truth, and may well be retained provided the *true Life* of the latter be not lost sight of, nor denied, and provided the expressions be used in their proper meaning. They refer simply to distinct grades or degrees of Life. The one world may be called inorganic and inanimate, because in character and in life it is of an altogether inferior grade. The Term, "Organic," may be reserved to designate all material structures above the great gulf, which separates the mineral from the plant kingdom. And the Term, "Animate," reserved to designate the plant life and all forms and grades of Life from this upward to the Divine.

Thus we have Life in all things, but in an ascending scale. First, the Life of the Mineral Kingdom, real but too low to be ordinarily so named, then Plant Life, Animal, Human, Angelic, Divine. It must be acknowledged that the view which we have given of Life is clear and definite, reasonable and immeasurably better than the obscure, mysterious thoughts concerning it which leave it the great inexplicable Enigma.

The Great Mystery of Life is in the simple *fact* itself of the possibility and reality of the forces, which produce the wonderful phenomena of Life, from the lowest to the

The Manifested Life we know

highest grade. These forces and phenomena *are*. They spring directly from the Infinite Creator, His manifested wisdom and power, bright with the brightness of His glory. The manifested Life we *know*; deeper and further the human mind cannot penetrate.

SECTION VIII PERSON

We know what it is to be a Person by the Intuition of our own Personality. By Personality is meant that thing or characteristic about ourselves in virtue of which we are Persons. Although this is a very plain and simple thing much confusion or indefiniteness of thought has prevailed in regard to it. That which has often been said in exposition of it is very unsatisfactory, leaving us in doubt as to what "Personality" is. It has been declared to be incapable of definition; to be superior to definition; it is said that it cannot be analyzed into simpler elements; it is itself the simplest of all, can be made no clearer by description. It is called a conviction; a special apprehension in regard to self beyond what we know in regard to material objects; one of the high characteristics of humanity; the very essence of man's individuality; one of the main elements in his sense of independence, of freedom, of responsibility. All this throws a mystery about "Personality," and is a complete failure to state what it is. In regard to some things, this mode of speaking may be necessary, but this is not the case in regard to "Personality." There is no difficulty whatever in making a plain and readily apprehended presentation of it—thus:

A Person is an *individual* Being who has Cognition, Emotion and Will, or who thinks, feels and wills. An animal is all this, but is not called a "Person," only because his cognition, emotion and will are of a low order and the term "Person" is reserved for individual beings

who have cognition, emotion and will in the degree, at least, that man has them; ourselves, angels and God are Persons. Animals, being of a lower order, might be regarded as incipient or immature Persons, though they can never mature into such.

The definition, which we have given of a "Person," is the same as that of a "Spirit," except only that the word "Spirit" has a wider meaning, or application. It designates all spirits however low in the grade of spiritual beings they may be; while the word "Person" is used only for the higher grades; for man and all spiritual beings above him. Of these higher beings it may be said, a Person is a Spirit and a Spirit is a Person. A Person, therefore, is a Substantial, Spiritual Reality of the higher order. He is a superior Spiritual Substance, with a true "being" of his own giving him an *individuality*, by which he is separated and distinguished from all other persons and things, and possessing the inherent attributes of cognition, emotion and will. To him, and to him alone, the personal pronouns are properly applicable, I, thou, he, me, you, they. Again, in as much as all spiritual beings of the grade of man and upward and they alone are distinguished by the knowledge of "right and wrong" and moral obligation, a Person may be otherwise defined as "An Intelligent, Moral Agent." Animals, though they are spiritual beings having, as they do, cognition, emotion, will, are not sufficiently high as intelligent beings to be moral agents, and hence are not Persons.

Thus the mystery and obscurity are removed from "Personality," the state, or the fact of our being Persons. We know what this is Intuitively; because we thus know ourselves. We are "Persons;" because we *are* what we know ourselves to be, individual Spirits of our own grade of spiritual being, having cognition, emo-

Our Individual Being

Identity

tion, will and moral agency. As thus explained, the Conception, which we have, is simple, clear and definite.

One of the essential, intuitively and hence infallibly known characteristics of ourselves as Persons is that we are *created* Beings, indestructible except *ab-extra* by the act of the Creator, and immutable in our spiritual substance and attributes; these are with an unbroken continuity of being; hence our "Personal Identity." Another essential characteristic, intuitively and infallibly known of ourselves is that, though our "Being" is derived from and dependent upon the Creator, it is our "True Proper Being," our own individual being, which separates us as Persons from God, as well as from all other Persons and things. Thus familiar with our own Personality, we understand the Personality of our fellow men, of angels and of God; although in regard to the Divine Personality we are not able to know it as "Infinite Absolute."

Personal Identity. This is Intuitively known. Knowing that we are "Persons," we know that we are with an unbroken, continuity of continued Being. This gives us a past, a present and a future as long as we are living Persons. For the full exposition of this see page 76.

SECTION IX POWER

Power is a Substantial Reality. Without a Substance to which it belongs and in which it inheres as a quality Power has no reality. It is an "Intuition." We know it by the immediate cognition of the Reality itself. Our prime Intuition of it is the cognition of our own spiritual Power. Its character is very distinct and unmistakable and to it we give a Name; we call this "Reality" *Power*. This sums up and expresses in one word that which, in fact, is twofold. We cannot make the thought any more distinct by using other simple words to distinguish it.

Power a Substantial Reality

These are only other mere names for the same thing, such as force, strength, energy, vigor and throw no new light upon it. The only way by which we can give a clearer verbal expression of it is to use such form of words as will show the twofold character of the Reality; hence the twofold significance of the names given to it.

The "Reality," which we name "Power," is that which causes, accomplishes, produces; which makes, creates, works, executes, directs, controls, brings to pass, gives rise to, gives being to, brings into being, changes, acts and reacts, opposes resistance, *does something*. All these are essentially the same and their common characteristic is that they express the twofold nature of that which we call Power. All these terms include "a *thing which is done*." Without *this* there can be no thought of Power. It is necessarily that which *does something*, accomplishes something, causes something, etc. Without something which is, or is to be done there is no possibility of Power. We can form no thought of it; for the "Reality" itself is the "*doing of something*." There are some words which express this twofold nature of Power, such as "Efficiency," "Execution," "Causation." These all necessarily include in their meaning "effects" or "results." Efficiency is that which effects. Execution is that which brings something to pass or puts into effect. Causation is that which makes something. These three words are very familiar and well understood and are very convenient to express the essential *twofold* nature of Power, as that *which causes effects*.

That which has never affected something and never will nor can is no Power. And still further, so truly is "effect" essential to Power that this must be ceaselessly energizing—that is ceaselessly doing something. It *is* only *as it energizes*. It began its created Reality as energizing, that is putting forth its efficiency. It continues

“Effect” Essential to Power

a Reality by energizing and should this cease at any moment it would be hopelessly lost forever. Its being without effect, even for a moment, is impossible. The distinction between what is called active power and power at rest is only the distinction between its *effects*. “Active Power” is that which is producing manifest changes. “Power at rest” is that which is producing and maintaining an equilibrium with an equal opposing power; the stationary equilibrium is the *effect* of the two opposing powers in full and true energy. The high pressure steam, quietly at rest within the boiler, is exerting its full power to burst forth with explosive violence, as truly as it does when it is driving the engine along its course with great velocity. If the word “Pressure” be used it will serve to make distinct the thought of the essentially ceaseless energizing of Power. Pressure is *not* the moment it ceases to *press*. Power is *not* the moment it ceases to *energize*.

How do we know that there is this Efficient Reality? It is a fact of Infallible Consciousness.

It has often been maintained that all that we know of Power is simply antecedent and sequence; and that, as far as we can discover, there is no efficiency. Even Sir William Hamilton seems to maintain this. He says “It is now universally admitted that we have no perception of the connection of cause and effect in the external world.” “We have no perception of any force, or efficiency.” “That we have no perception of any real agency of one body on another is a truth, which, etc.” “But there are many philosophers, who surrender the external perception, and maintain our internal consciousness of causation, or power.” This also he rejects. All this, however, ignores the plain data of Consciousness. It is not antecedent and sequence which we cognize, but *Real Efficiency*.

Consciousness of Efficiency

Our prime cognition of it is the cognition of our own spiritual efficiency. As our thoughts arise in our mind we are conscious of direct efficiency over them. They do our bidding, we suppress one and bring forward another, we direct and shape them at pleasure. We reason in one way and another as we choose. We *create* our Phantasies, which we hold up before our mental vision for awhile and then dismiss. We allow one emotion to prevail and stimulate its activity, we restrain another. By our Will we *execute* our wishes, thoughts, aims, determinations. All this is *pure* and *distinct efficiency*. It is cognized as such free from all antecedent and sequence. The Consciousness itself is of pure efficiency. There is no antecedent to be followed by a sequence. We are conscious simply of ourselves as Agents, *Executors*; we are conscious of the execution of thoughts, emotions, wishes, aims, determinations; we cognize that we mould, fashion, direct, control our own spiritual states and activities by our own efficiency.

The Consciousness of Efficiency is even yet more distinct. We are conscious that we have inherent *self-acting* efficiencies, producing their effects. Thus, we have the self-acting efficiency of thought. This produces our thoughts, as they come and go, by virtue of inherent efficiency. We have our self-acting efficiency of emotion; this produces our rising and falling emotions, coming and going of themselves. We have also our self-acting efficiency of Will which produces our voluntary acts, or volitions. This is a very positive and distinct cognition on our part, and is the cognition of pure efficiency; there is not the least trace, nor possibility of sequence. The things cognized are simply *efficiencies in action*, producing their effects; effects which are the *activities* of the efficiencies.

We are still further conscious that the efficiencies act

Executive Power over the Body

and react upon one another, their greater or less activity being according as they permit one another free play, or as the one efficiency opposes and holds another in the rest of equilibrium. As we point out elsewhere, in the chapter on the Will, the various powers of the Soul, those of thought, emotion and will, are, as are the forces of the material Cosmos, ever energizing and acting and reacting upon one another; the varied activities and rest of the Soul being the resultant of these inherent, ever inter-acting powers. Here, again, all antecedence and sequence is wanting and impossible. We have simply efficiencies energizing, inter-acting; their activities are the effects.

Yet again, we are conscious of our possession of *Executive Power* over the Body. We carry our thoughts, determinations into actual execution. Here also is pure efficiency. Whatever may or may not be the result beyond our spiritual selves, the *Volition itself* is the deed *done* within the Soul. How far the body responds depends upon its condition and its own self-acting efficiencies. If these be in proper "self-activity," we direct them; our Will efficiency and they interact with one another and the bodily movements are the *Resultant*.

The fact that our bodily actions are produced by a mechanism of nerves, muscles, tendons and bones does not enter into the question. The simple thing which we cognize is that we have authority, control over this complicated *self-acting* mechanism. All its voluntary emotions are our own execution. We have no consciousness of a line of mere sequences, as volitions, nerve action, muscular action, movements of tendons and bones and *then* motion of the limbs. The mechanism is a unit, more or less unknown in its structure and its laws, to most persons almost thus completely unknown, but we all know that *we have power over it*, we direct and con-

Self=Acting Efficiencies

trol it; we utilize it. We *will* and it is done; the *doing* is our own.

The Body is a self-acting machine. Its motions are the effects of its own inherent self-acting efficiencies. The mechanism must be in proper working order, in union with ourselves, and must be self-acting with its own inherent efficiencies. When this is the case we direct, determine its activities by our own self-acting Will efficiency in virtue of the interacting of the two efficiencies. Our Consciousness is not that of a separate volition and of a separate bodily movement which immediately follows we know not why nor how. Our Consciousness is that of a *Unit*. We are conscious of our own *self-acting Will efficiency* and of the *self-acting bodily efficiency*, and of *these as acting and reacting upon one another*.

If the Body is not in proper working order or condition and in proper communion with the Soul, there are no physical efficiencies for our Will efficiency to act with and upon, and consequently there can be no bodily voluntary movements. But if there be such bodily efficiencies, our Will efficiency acts with and upon them and the bodily activities are the resultant of the two interacting efficiencies. Moreover, the activities are greater, or less as the one efficiency prevails over and controls the other; or as they hold one another in the equilibrium of equal opposing forces. Such equilibrium takes place when our Will efficiency is unequal to the task of lifting the arm, for example, while the hand holds a weight beyond the strength of the body to move; the combined efficiencies of the Will, the Body, and the weight counterbalance one another.

So also, we are conscious that the energizing of our Will efficiency as exerted over the Body varies greatly. At times it is only of the slightest character, and at

Efficiencies of the World

other times it is of the utmost efficiency as thus exerted. At one time we move our limbs with the greatest ease, and at another we must exert our greatest effort. This all depends upon the character, or conditions of the bodily efficiencies with which the Will efficiency interacts and the work which they have to do. When the self-acting bodily efficiency must be violent and powerful, as in great physical exertion in running, climbing steep mountains, carrying heavy loads the energizing activity of the Will must be of a corresponding character, while this is very slight when the work to be done requires little effort. We all are perfectly familiar with the fact that great muscular exertion requires the putting forth of great Will power. By dint of Will-power men with frail bodies have often shown wonderful energy and endurance, sustaining the exhausted body by the might of the Will. Some have suggested and, perhaps, have maintained that bodily fatigue is in the Will, rather than in nerves and muscles.

Thus it is perfectly evident, that our consciousness of the voluntary activities of the Body is that of pure and real Efficiency; the spiritual and the material in their inter-action. The relation of the Will to external forces and work is unfolded in the chapter on the Will.

Deriving our thought of "Efficiency" from the cognition of our own inherent spiritual Efficiencies, we understand the Efficiencies of the material World, as they are brought within the reach of our cognition.

As just noticed, we know the self-acting efficiencies of our own Bodies; and we know the self-acting efficiencies of material things, as they act and react upon those of our Bodies. In putting forth our physical efforts, we meet with resistances which we overcome, hold in the rest of equilibrium with ourselves, or are overcome by them; our own efforts being greater, or less according

Observation of Forces

to the character of opposing forces and the results which we endeavor to accomplish. But the material efficiencies are not always opposing. They often are, as we are conscious, conjoined with our own efficiencies; and we constantly make use of them to enable ourselves by their aid to accomplish desired work. In addition to this, we cognize the varied Efficiencies throughout the Cosmos as they act and react upon one another and produce the wonders of its ever-changing, beautiful phenomena.

The Error of those, who deny that we perceive efficiency in the material World, lies in the fact that they direct their attention to *objects* and not to forces. The familiar illustration is that of the two billiard balls. When one strikes the other, it is said, all that we see is antecedent and sequence; the impact of the balls, succeeded by the motion of the one which was at rest.

Our attention should be directed to *forces*; to their interactions, their oppositions or resistances, their conjunctions, their equilibrium, their varying degrees of power and activities, their self-activities, their measurement; the manipulation of them, their utilization, the laws by which they are governed, as "inversely as the square of the distance;" the varieties of forces, as Electric, Magnetic, Chemical, Mechanical, Molecular, Heat, Light, Actinic, Life forces, plant and animal, Polarization, Inertia; their different modes of acting, as expansion, contraction, attraction, repulsion, in closest impressed contact, a less than hair-breadth separation being destructive, as in cohesion, at distances even of millions of miles, as in gravitation; constructive, disintegrating, direct, inductive; their transmutations, the peculiarities of the effects of different forces, their manifestations in Motions; "*Motion*" is *visible force*.

The different forces are different modes of motion. Tyndale's great doctrine. "Heat," which is one of the

Motion is Visible Force

great material forces, "a Mode of Motion." The *velocity* of Motion is the *measurement* of force. There is nothing with which Scientists deal more than with *forces*. These are the material of their sciences. They build up great systems of calculations of minute exactness, as to complicated practical results, upon them. So true is it that it is with forces that they deal, that some go so far as to hold that all objects are simply forces or motions, that is manifested forces, or forces in activity; the most solid, firmly abiding bodies being, in fact, atoms innumerable beating and dashing against one another with velocities as high as many millions of vibrations per moment.

The manipulation and utilization of forces by men may be regarded as an actual demonstration of real and cognized Efficiency.

Motion is visible force. Its velocity and its resistance to opposing force are its measure. The initial velocity of a projectile is the measure of the force developed by the explosive within the gun, and the resisting force of the steel-clad Target overcome is the measure of the energy imparted. Men regulate the Motion by increasing or diminishing the amount of imparted energy, or by the application of opposing force; the imparted energy remaining the same, but held at rest in equilibrium by equal degree of the opposing force applied, or acting with greater or less velocity according to the degree of the opposing force given. Men, with their knowledge of the *various forces*, use such of them as are best fitted for the accomplishment of desired work, and generate and maintain the degree of power needed according to the amount and character of the work to be done. It would be difficult, indeed, to conceive of a more complete demonstration of *real* and *cognized Efficiency*.

In regard to Scientific men and men of practical abil-

We see Efficiency

ity it must be remembered that they depend entirely upon *observation of realities*, that is upon the immediate cognition of them. The very thing, therefore, which we cognize in the material world is "Efficiency." The true interpretation of the phenomena of the billiard balls is that it is a display of *motion*, manifested force. The first ball is in rapid motion, it has that amount of active energy; when it strikes the ball at rest its motion, that is its active energy, is imparted to it; coming itself to rest it gives its motion, its active energy, to the other ball; this now moves on till by opposing forces, such as resistance from air and from friction on the table, it is deprived of its motion, its active energy, and comes to rest. Here again the very thing which we *see* is "Efficiency" —to see is to cognize.

In view of what we have said of our cognition of material Efficiency it is absurd to affirm that, notwithstanding all, we do not *see* anything more than the sequence of these things; that we do not and cannot *see* the efficient *connection* of cause and effect.

This is to have eyes and see not and to darken knowledge by words. What we mean by "Efficiency" is the *reality which we see*. It is something *done*; it is the *doing* of something; it is that "*which does*." What *is* that which *does*; which binds cause and effect together in invariable, immutable, exact relations according to immutable laws; or in other words what *is* "*Efficiency*," "Power" is as impenetrable a mystery as "Being," "Substance," "Solidity," the human Soul, God Himself. All that we can know are these realities as they are presented to us; into their inmost mysteries we cannot enter. All we can possibly know of "Efficiency" is that it is that Reality "*which acts*" and "*does*," in the way in which we cognize that it does; its effects are its own activities, *itself in action*.

Importance of Knowledge of Power

We have endeavored to unfold the Testimony of Consciousness in regard to the true nature of "Power" and our Cognition of it, in the fullest and clearest manner possible, because it has been denied that there is real Efficiency, or that we have the knowledge and proof of it. And also because of the essential importance of this assured knowledge. Without this we can have no true knowledge of the real character of our own Souls, and their activities, nor of the material world and the activities prevalent throughout it. And yet more, because having no assured true knowledge of Power as Efficiency, we can have no true knowledge of God and of His relations to us and the world, and, indeed, no proof of His Being. All thoughts of Him in His own Being and as Creator, Upholder, Guide, Guard and Benefactor vanish away; the whole Universe of material things and of intelligent creatures, including ourselves, becomes a Mystery of the deepest and most inexplicable character; as far as we could know, there would be no such thing as Cause and Effect and the need and the Reality of the First Great Cause of all; there would be for us no "Infinite Absolute;"—and the aspiration and reaching out of the Soul towards it, as the One to whom we are responsible and to whom it is our highest act as intelligent beings to render Love and Adoration, would be destroyed; the World would be without God.

SECTION X MOTION

We have already given one Definition of Motion—"Motion is visible Force"—or "It is manifested Force." A still further definition, however, is needed of it, as the question arises What is this manifestation of force?—or What is "Motion" by which force is manifested? The additional definition may be expressed, thus—"Motion is the increasing and the diminishing of distance between

Twofold Definition

objects." This thought, or conception of Motion we have by Intuition. It is a Reality which we immediately cognize. Being a reality it necessarily involves Substance. It is a Substantial Reality, because it is a quality of Substance without which it is an impossibility.

This thought is necessarily connected with Space. Some have defined Motion as "Translation in Space." This, however, is incomplete and unsatisfactory. The Exposition which we have already given of Space reveals the true character of Motion. Real Space is the expansion of a material object and the distance between objects, and Motion is the increasing and the diminishing of this distance. This necessitates at least two objects, or parts of an object that motion may be possible and actual. To illustrate this, we may suppose an absolute void, or a perfect vacuum without circumference, or boundaries; a pure imagination, however, and unthinkable in reality. If within this, there be a single indivisible object, having within itself no moveable parts, no real motion would be possible. The object could not move in any direction because all directions are obliterated, it could go no nearer to, nor further from any circumference, or boundary or part for there are none, nor to or from any thing, for there is naught but itself.

It may not be said, that it might, nevertheless, have a "translation" though there is nothing to indicate this, for the only conception which we can form of translation and the only thing which we can mean by it is the increasing and the diminishing of the distance of an object from something else. Beyond that of a mere fictitious, imaginary unreality, such an object has no motion. But the moment a second object be introduced motion becomes a possible reality. Such being the essential thought of Motion, all kinds of it may be produced, straight forward, curved, zig-zag, rotary, vibra-

Eternity differs Radically from Time

tory, continuous, intermittent, occillating, of maintained or varying velocity, and with any degree of intensity or slowness, through atomic, microscopic, common place distances, or through the immeasurable courses of the stars and nebulæ.

Moreover, the all important fact to be noted with especial emphasis is that this Reality, "Motion," in all its varied aspects is *known* by our immediate *cognition* of it, as presented to us both by touch and sight. It is indubitably true, that we have as distinct and unmistakable visual perception of Motion, as we have of any other Reality that comes with the field of our Vision. This is brought distinctly forward by our Exposition of External Perception. See Chapter V, pages 223-225. Also page 122.

SECTION XI TIME AND ETERNITY

Our Intuition of Time has been unfolded at length. We here need only to state the fact that we cognize Time as a Reality, having its *being* in created intelligences and things. It began with Creation, and continues as long as the "Creation" continues to be. It would end with it. Without it, Time is unthinkable. Time is a quality or attribute of finite beings, which are and continue to be. It is their continued and measured duration.

How Time and Eternity stand related to one another we know not; but we know that Eternity differs, not in length of duration, but radically from Time, and of it we cannot even think. Eternity is neither Past, nor Present nor Future; neither any one nor combination of these. We do not know what it is. It has its Reality in the "Infinite Absolute." We can form no possible thought of the "enduring" or "duration" of the "Infinite Absolute." It is unthinkable.

The Foundation of All Truth

SECTION XII SPACE AND INFINITUDE.

Our Intuition of Space has also been unfolded already. It is a finite Reality, having its real being in finite material objects. Without these, it is only imaginary, with imaginary objects. It is the expanse of material substances and the distance of one material object from another; otherwise it is unthinkable. Hence, contrary to that which is repeatedly affirmed, it is finite and has its boundaries, these being at the outer realms of the created Universe. All beyond the outlying material Ether is only imaginary in itself and objects.

Space stands related to Infinitude, as Time stands related to Eternity, a relation which we cannot in the least understand, Infinitude itself being unknown and unthinkable, and having its Reality in the "Infinite the Absolute." This all refers to Material Things. We have no Intuition of Spirits within Space nor of their motion therein, except that they are *omnipresent* within the Body and as far beyond it, as may be permitted by their vital union with it, and except as they move with the moving body.

SECTION XIII THE ESSENTIAL DISTINCTION BETWEEN THE SPIRITUAL AND THE MATERIAL

This is here mentioned again because of its Supreme Importance. As we have most fully pointed out and emphasized to the utmost, this is the positive and the clearest possible Testimony of Infallible Consciousness, and is the foundation of all Truth, Knowledge and Science. Unless this Distinction be fully recognized and appreciated, there can be no proper conception and understanding of Ourselves, the World and God, and true Science is overthrown by Confusion and Error.

Truth has prevailed and will prevail because men see

Impregnable Truth

with a Vision, which cannot be blinded, that they in their true selves are Spirits lifted above and distinct from the world of matter, that with it their Being and attributes can never interchange, blend nor become one. They know themselves as Living Persons like unto the Invisible and Omnipresent God, animating and dominating a material Body within which they dwell for a season.

This is the Impregnable Truth before which all forms of error and irreligion must give way.

Intuitive Perception

CHAPTER VIII

Necessary Truths

SECTION I NON-CONTRADICTION.

ALL that which we have said concerning "Intuitive Perception" makes it evident that our "Intuitions" are varied and innumerable, and because of the Infallible character of the Testimony of Consciousness, they are all necessary in one sense of the word. They are all Infallibly True. The things of which we have immediate cognition are necessarily what we know them to be. They are Realities truly and indubitably known.

There are, however, certain things among these Realities which are in themselves necessary. They are what they are, and cannot possibly at any time or place or under any conditions be other than they are. These are often called "Necessary Truths," "Fixed Principles," "Fundamental and First Truths," "Eternal Verities," "Regulative Laws of Thought," and, when formulated by discursive reasoning, "Intuitive Truths," "Axioms," "Rules," "Principles," "Aphorisms," "Maxims." They are all intuitively known and on this account have received, because of erroneous thoughts of "Intuitive Perception," erroneous names, such as "Native Beliefs," "Inborn Convictions," "Intuitive Beliefs and Judgments," "Constitutional Appetencies," "Heaven-given beliefs, having the sanction of Him who made us," "Original Principles implanted in the human mind." We have repeatedly spoken of the mystic, unscientific

They are Realities Cognized

and erroneous character of the thoughts thus designated. From the very first, in unfolding our Exposition of Intuitive Perception, we have insisted that it is the looking upon that which *is* and is present, the immediate Cognition of realities as they *are* and as *what* they are, so far as they are present to us. This gives us our knowledge of these Necessary Truths, of which we are now speaking. They are Realities upon which we look and are what we know their true nature or character to be. They belong both to the spiritual and to the material world, and are distinctly cognized as such.

The great difficulty in regard to them is their Necessity. To account for our Conception of them as "Necessary Truths" is the great problem which has wearied and baffled philosophers, and which has driven them simply to accept the known fact as a fact; or to resort to some kind of mysterious making of it, in some way or sense, a gift from heaven. Our aim, therefore, is to explain the problem of the Necessity attached to these Realities of which we speak. The Exposition which we give is founded upon and grows out of our Exposition of Intuitive Perception and the Infallibility of the Testimony of Consciousness. We cognize Realities which *are* and are what we cognize them to be; and our Cognition is Infallible. This gives us plainly and indisputably the Great Law, Principle, or Fact of *Non-Contradiction*.

When we cognize a "thing" as being, or "*that it is*," it must necessarily *be*, for our Cognition is infallible. Moreover, we cannot cognize *that it is* and at the same moment not cognize it, or cognize *that it is not*. This would be what we call *contradiction*, "the affirming and the denying the same thing;" and the impossibility of this is a "self-evident fact." We immediately cognize the impossibility itself, and this "Cognition" is infallible.

The Law of Non-Contradiction

Again, when we cognize a "thing" *that it is*, we also cognize, that it is that which we cognize it to be, and hence it must necessarily be *this*, or have *this* characteristic, for here, again, the Cognition is infallible; and here also, again, we cannot cognize the character of a thing and at the same moment not cognize it, or cognize that such is not its character. Here, again, we would have Contradiction, which is impossible, as we have just seen.

Thus we have two things, the Infallible Testimony of Consciousness, or Intuition, and the Law, or Principle upon which it acts, that of Non-Contradiction, a law which Consciousness itself makes known. In these two things, which lie at the foundation of all knowledge and of all Science, we have the sufficient and Scientific explanation of the *Necessity* attached to Necessary Truths, both of the spiritual and of the material world, and are entirely relieved of all need of "Innate Convictions," "Inborn Beliefs," "Constitutional Appetencies," "Intuitive Judgments," "Heavenly Gifts and Sanctions," and "Impotence of Mind" upon which Sir William Hamilton seems, in large measure, to depend.

We have already mentioned that, without making any attempt to give a complete list or classification of Necessary Truths, they belong in general to Numbers, as in Arithmetic, Mathematics; to Space and Objects, as in Geometry; to Material Forces, as in the laws of Nature, the forces being what they are; to Thought, as in Logic; to Moral Good, as in Right and Wrong and Moral Obligation. We unfold and show the Truth of our Explanation of "Necessary Truths" by a few examples of these.

SECTION II NUMBERS

Thus very simply in regard to Numbers. It is a necessary Truth that two and two make four. This necessity is universally acknowledged; the absurdity which

Two and Two Necessarily Four

has actually been made, though perhaps not seriously, of saying that possibly in some other possible world the product might be five, is self-evident.

Why are all men so assured of this numerical necessity? It is not by reason of some special insight by which it is seen; nor because of any inborn conviction or native belief. The reason is simply because it involves a contradiction for the result to be otherwise. The proposition is that we take two and only two units, and add these to two and only two units; having done this we call *this* product *four*, this is the name given to *it*; or the product is four units, that is we have *taken* four and we *have* four. The product is the number of units which we have taken, according to the proposition acted upon. For the result to be anything else, the proposition would itself be contradicted. We cannot take *only* four units and not take *only* four. Moreover, the name "four" is the name which is given to *this* number of units alone. We cannot have the number of units which we call *four* and not have them, or have *that* number the name of which is five.

The same thing holds true of every arithmetrical proposition. However intricate or lengthened out it may be, each successive step is as simple as the one which we have named, with the same necessity and the same explanation of it. As the highest figures running into millions and upward are all made up of the ten digits, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, so the most complicated problems are made up of the simplest, and we know that the same necessity must belong to the whole which belongs to each successive step. It is a contradiction to say that each step is necessary, but the result of them all is not.

SECTION III GEOMETRY

The Necessary Truths of Geometry have the same ex-

Parallel and Convergent Lines

planation of Non-Contradiction just given of Numbers. We have already spoken of Parallel Lines, page 17. The affirmation is often made, that we have an innate Belief or Judgment that they can never come together, however far extended beyond our sight, nor even if infinitely extended. The true explanation is that Parallel Lines are lines which throughout *their entire length* are *equidistant* from one another. For such lines to come together at any point would be a contradiction. They would not be what we call parallel. We cannot affirm of lines that they are *parallel* and not affirm it.

The absurdity of speaking of their Infinite extension is readily shown, and this affords another illustration that we are strictly confined to the finite. There are and there can be no such lines. Lines do not admit of infinite extension; and were they thus extended we could not follow them in thought; they would be unthinkable; and we could make no affirmation of any kind regarding them. The proposition is itself contradictory. Lines infinitely extended have no end and yet it is affirmed, that they cannot meet one another at their infinite extension. The proposition requires and denies an end.

Again, Parallel and Convergent Lines become the same if infinitely extended. *Convergent* Lines, infinitely extended, at each step even if the steps be measured by millions of miles would be nearer one another only by a distance infinitely small. But this is absolute zero; and absolute zero infinitely multiplied would still be absolute zero, and the measure by which the lines approach one another at each point along their course could never amount to the distance between them, and the convergent lines could never meet, they would be *Parallel*. With equal truth the same definition could be given of both, thus—Parallel and Convergent Lines are both

These Instances Prove the Truth of

lines which can never meet together if infinitely extended. *Again*, should the Convergent Lines meet at their infinite extension, which as we have seen is impossible, the point of contact would *not* be an *end*. Infinite lines have no end, and if convergent, should they meet, they would cross one another at the point of meeting and diverge till separated by an infinite distance. Convergent lines, infinitely extended, become divergent lines, and are infinitely separated at their infinite extension, where the proposition requires that they should meet and touch one another.

In thus speaking we are not violating the fundamental principle, that we must confine our reasoning to the finite, for this is an illustration and a *proof* of its truth. That which we have been presenting is simply a series of self-evident contradictions into which men must necessarily fall, when they endeavor to think, affirm, or reason of things within the realm where human thought is powerless.

Another instance has been given of necessary Truth, the necessity of which is known by some kind of inborn conviction. "Two straight lines cannot enclose a space." The explanation is that by *enclosing* a space with straight lines we mean bounding it upon all sides of which there are at least three. To affirm that a space is bounded by two lines and that it requires *three* boundary lines is a contradiction, and hence necessarily impossible.

Again—"A Triangle *necessarily* has three angles." We cognize a certain figure which we call a Triangle, because it has *three* angles. It is a contradiction to suppose that there can be *such* a figure with more, or less than three angles.

"All right-angles are *necessarily* equal to one another." We cognize a certain angle, one of 90° , we call it a *Right-Angle*. It is a contradiction to suppose such an angle

Explanation Given of Necessity

to be without having this number of degrees. An angle which has not *this measure* is not a right-angle. Having the *same* measure all right angles are equal and necessarily so.

“The sum of three angles of a Triangle is *necessarily* equal to two right angles.” This is not immediately cognized. Most men have no knowledge of it. How do we know that this is necessarily true of all triangles? It is because, when *taught* that this is a *property* of triangles, we know that every figure having three sides and three angles has *this* property, which belongs to *this* figure. For us to think otherwise would be a contradiction. It would be for us to deny that which we *accept* as true.

“The whole is greater than any of its parts.” We cognize an object and its divisibility into parts. By a part we mean that which is *less than* the whole. The maxim is a *necessary* Truth. It is a contradiction for us to think of that, which is less than the whole, as equal to or greater than the whole. “The whole is equal to the sum of all its parts.” This is a *necessary* Truth. By the sum of all its parts is meant, neither more nor less, but *all* the parts into which the whole has been divided. It is a contradiction for us to think of these as either greater or less than the whole which has been divided into them. The equality is, therefore, a necessity.

Every axiom and problem of Euclid has a necessity, the explanation of which is of the same character. Those whose intricacies we cannot follow, we know have the same necessity; because each step is itself a necessary truth, the explanation of which is that which we have given, and the whole constructed of these must be necessary likewise.

The instances, thus far given, show the character and prove the Truth of our Explanation of the *necessity* which is attached to Necessary Truths. By Infallible

Mystic View Rejected

immediate Cognition we cognize a certain class of Truths, but only in the concrete, that is only in single, individual cases. We infallibly know them as *being* and as being *what* we know them to be. The Truth thus known becomes necessary and universal when and because it involves a self-evident Contradiction for it to be otherwise.

It must be noted that this application of the Law of Non-Contradiction is altogether different from that in which it has been employed by others.

Our Explanation of the Necessity attached to Necessary Truths comes forward yet more clearly and receives striking confirmation from its application to "Cause and Effect."

SECTION IV CAUSE AND EFFECT

This may be regarded as one of the most interesting and important of all the Problems of Philosophy. It lies at the foundation of practical life, of all Science and of our assurance of the Being of God. The Truth is that "Every Effect must have an adequate, Efficient Cause."

The Necessity attached to this has been explained in the same mystic and unsatisfactory way in which men have endeavored to account for the necessity of other Necessary Truths. It has been referred to some kind of a heaven-given or innate Belief, Judgment, or Principle of the Mind, or to a mental impotence. Casting these aside, we find for it the same beautiful and Scientific explanation already given in regard to Necessary Truths.

By Infallible Cognition, as we have already pointed out, page 366, we have the knowledge of True Efficiency, or "Power." In unfolding our Intuitive knowledge of this, we made mention of its extreme importance. That we have infallible Cognition of True Efficiency is necessary for our thought and assurance of the Great Truth of Cause and Effect, and of the Necessity which belongs

Reality of Efficiency

to it. If there be no real "Efficiency," there can be no such *Reality* as Cause and Effect, and unless we have an Infallible Cognition of this Reality we can have no assurance of the Necessity, which is attached to it. Having established the Reality of real Efficiency and the fact of our Infallible Cognition of it, the Reality of "Cause and Effect" becomes self-evidently true, and the Necessity attached to it becomes a Problem of ready solution.

By Infallible Cognition we cognize the Reality in the concrete, that is in single individual cases. Every Motion which we see is Visible Power, is "Manifested Efficiency," or is "Efficiency manifested." Every Motion is a Change; Every Change is a Motion; Every Change is a "new becoming," "a coming into being." It is an acting, an activity, an action, "a "doing," a something done. Our Infallible Cognition of Efficiency is of it as that which acts, which has activity, which "does," that is, which produces, or effects something, which produces, or effects Motion, Change, brings into being, executes, brings something to pass, which causes something, which effects.

This is our infallible, positive, distinct cognition of Power, that is of Efficiency. We express this by the definition of Power as that "*which does something*," as that "*which produces its effect*." Or we express it, in one word, by calling Power a "*Cause*," that is, that which produces its effect. This is our Conception of Efficiency and of Cause. They are that which *does* produce an effect. It is not the conception of that which may or can produce it, but of that which *does* produce it. If Efficiency does not produce its effect it immediately *ceases to be*. Hence, as we have before pointed out, every Power is always necessarily in full energy—ever energizing. It is *only as it energizes*. It is *active* when

Ever=Energizing Efficiency

it produces manifest effects; it is at rest only when in equilibrium with equal opposing force, the effect of the forces being the equilibrium of them in full energy. All this is true of Cause in the sense of real power, for it is only a different name for ever-energizing Efficiency. A Cause cannot be a cause without producing its effect. It ceases to *be a cause* the moment it ceases to produce its effect.

Hence it is that, according to our Infallible Cognition, "Cause and Effect" and "Effect and Cause" are necessarily connected. Cause is that *which produces its effect*. Effect is that *which is produced by a Cause*. And still further, Cause is *Efficiency* producing its effect, and "Effect is the *activity* of Efficiency, that which is *produced by Efficiency*. Thus by our Infallible Cognition we know not only that Cause and Effect are necessarily connected, but also that the *connection* is that of Real Efficiency.

This is the very nature of the *Reality*, which we know by the Infallible Cognition of it in the concrete, that is in single, individual cases. And the Truth, thus known, becomes necessary and universal *because* it involves a *contradiction* for it to be otherwise. We cannot infallibly cognize the Reality as *being*, and as being what we know it to be, and at the same time cognize it as *not being* and as *not being what* we know it to be. We cognize Cause as that which produces its effect, and "Effect" as that which is produced by a Cause. It contradicts this to think that a Cause may be without its effect and that an Effect may be without its cause. Hence the necessary and universal Truth, "Every Cause must have its Effect," and "Every Effect must necessarily have its Efficient Cause."

This Explanation explains the universality of this Truth and also why it is accepted and practically acted

The Intuition in Children

upon by youngest children, by barbarians and by the most ignorant as intelligently and as confidently, as by the mature, gifted and wisest of men. The reason of this is, because young children, barbarians and the untaught have, as far as the Reality itself is concerned, as positive, and clear a Cognition of Efficiency and of Cause and Effect, as matured and educated men have, and, perhaps, a Cognition of it which is decidedly superior, because in them Intuition is their chief dependence and their characteristic activity, and because their intuitive perceptions are untrammelled and unperturbed by the activities of the discursive reasoning, upon which mature men come to depend and which so often leads them astray, even to the denial of self-evident Truths. This is an assured truth, that if we wish to learn what true "Intuitions" are, we must go, not to mature and reasoning men, but to children, to the untaught, to the uncivilized tribes, the true children of Nature; it is in these that they are seen and studied to best advantage.

Thus, if these be questioned in the unperturbed freshness of their Intuitions, it will be found that they have no thought of "Innate Beliefs, Judgments or Convictions," or of "Heaven-implanted assurances." Their reply with perfect confidence and without thought or hesitation would be, "I *know* that I and my companions have strength; we wrestle and struggle with one another; we match strength with strength and find which are the strongest; we throw down and are thrown down; we use the strength of ox and horse for work and burdens requiring more force than our own; we know and feel the power of wind and flood and wave; we battle with storms and tempests; we see and know the effect produced by blow of fist and hammer; we *must* put forth effort, and labor and use means to do what we want to do; we know that there is power in the bent bow, and

By all Power is a Seen Reality

in the flying arrow, and in the thrown stone, as they go through the air and strike down our victims or prey; we know that, when we find our work ruined, our habitations destroyed, our things thrown about or taken away, this did not happen of itself, it is evidently the work of some one or of some force, it is like what we *do* ourselves and see *done* everywhere around us; it is something *which has been done*, and the damage wrought is so great that it shows itself to have been done by a corresponding power; when we find footprints on the ground, or trace the trail through forests and over the plains we know that living men or animals have passed that way, because these are the marks of their footsteps, this is that which *is done* by the footsteps of men and animals.

It is by *seeing* and *feeling* these things that they know that there is Real Efficiency, a reality which *does* something, which produces its Effect and is *known* by its effects. They have *no other* thought of force, or Power. They cannot think of it as without effect. In all this there is no trace, nor thought of anything "Innate." It is simply that which they know from practical experience, from what they see and feel, that is, immediately cognize. To them Power is a *seen Reality*, "Efficiency producing its effects;" Effects are *seen Realities*, Efficiencies in activity, or Realities produced by power.

This is their only thought, to see and feel power is to see and feel its effects; to see and feel effects is to see and feel power; to put forth, or use power is to produce effects; to produce effects is to put forth, or make use of power.

Thus their Conception of the Reality is that of all men, and the law of Non-Contradiction, though they may be unconscious of it, acts as promptly and as effectually in them as it does in all others and gives necessity

From Earliest Childhood

to that which they see and know in individual cases. Knowing that Cause and Effect are *inseparably* and *efficiently* united together, they know that this must always and everywhere be true, because otherwise there would be a contradiction of that which they see and know. They can not at once affirm and deny that Efficiency and Effect are inseparably united. They cannot see and know that Efficiency is that which produces effects, and Effects are that which is produced by Efficiency and yet not see and know it.

Hence for them, and for us all, the Truth is distinctly known. Every Cause must have its effect, and Every Effect must have its efficient Cause, for a Cause cannot be a *cause* without its effect and an Effect cannot be an effect without a cause. A Cause is that which produces its effect, an Effect is that which is produced by a Cause.

The Explanation of the Problem which we have given is self-evidently true. It is so simple that we all may appreciate it; it meets all the requirements of the case; is perfectly satisfactory; is free from all mysticism and mere suppositions and is thoroughly Scientific. It is not argument, nor reasoning, but the simple presentation of the facts of Infallible Consciousness and of that which is the practical thought of men in general. They reason and act confidently upon the law of "Cause and Effect," because from earliest childhood they have *seen the Reality* everywhere around them and it has ever entered into their own practical, efficient, useful experience; and because they know that whenever and wherever they see this Reality, and wherever this Reality may be, *there* this Reality itself must necessarily be; it would be a manifest contradiction if it were not.

We must properly understand and appreciate the Intuition, and the necessity belonging to it.

Motion, Change, Activity is "Visible, Felt Power."

Effect is Manifested Efficiency

It is "Manifested Efficiency." Efficiency seen and felt. This is the *Reality* which we infallibly cognize, and whenever and wherever this Reality *is*, there it necessarily must be, it is a contradiction for a Reality to be and not to be, and then and there it must be whether it is seen or not.

The Reality is "Efficiency Revealed," that is Motion, Change, Activity, and these, being revealed Efficiency, bear the name of Effects, manifested Efficiency, and for the manifestation to be apart from that which is manifesting itself therein is a self-evident contradiction and impossibility.

That which we wish to express is a very simple thing, so simple that there would be no need to emphasize it, had it not been so seriously denied or questioned; it is that Effect is manifested Efficiency; Efficiency in action. It is in itself that which is done or produced or caused by power; *it is that which has a cause*. If there be that which has a cause, it must necessarily have a cause, whenever and wherever it *is*. This is expressed by the Maxim "Every Effect must have its efficient cause."

In regard to Cause and Effect much confusion of Thought and misstatement prevail. Thus it is often thought and said of something, that it has a number of causes. The meaning is that many different causes have combined to produce it. It is also often said of these, that some of them have no efficiency; they are simply inert conditions without which the effect could not be. For example, the cause of the high polish on a piece of marble is not simply the polishing to which the marble has been subjected, but also the inert, passive character of the marble, without which no polish could be given. A piece of sandstone, or chalk, not having this character, cannot be polished.

Such are the subtle, mysterious, marvellous forces of

Nothing Passive nor Inert

Nature, that it is arrogance and ignorance to speak of anything as being passive, inert. All things in Nature are bound together in a complicated, intimate Unit by forces and their activities, in a large measure hidden from human insight. In many cases, we can see the efficiency of things, which men so readily call inert. The marble itself is not inert in the polishing process. Its particles or atoms are so closely knit and so firmly held together by most powerful, inherent forces, that they maintain the integrity of the surface of the marble, *actively resisting* the polishing force and *uniting with* it in the production of the perfectly smooth surface, reflecting the light. A piece of chalk, having no such inherent forces resisting the polishing, crumbles beneath it, or has its surface torn up and worn down. Had we sufficient knowledge and insight we might find efficiency where least expected or stoutly denied.

Moreover, it is erroneous to affirm of anything that it has a number of causes, except in the sense that different causes may have the same effect; or that the same effect may be produced by a variety of causes. Thus illumination may be effected by direct sunshine, by moonlight, by electricity in Nature, or artificially, by electric lights, or oil-burning lamps, or by striking a match. But no actual, individual effect, in any particular case, can have more than one cause. Its *cause* is all that which produces it, however complicated it may be, however numerous are the efficiencies which unite together in its production. Should some of these contributing elements seem to be inert, there is no proof that they are so; the highest probability is, that they are not. And if they should be inert, they are not properly called *causes* of the effect; even *one* of the combined efficiencies is not a cause of it, as it has no power alone to produce it. The inert thing, if there be such, is only one of the contrib-

All Activities, Changes are Effects

uting constituents of the complex cause, and, moreover, the *efficiencies* which *produce* the effect are not derived from it; it is simply the opportunity of acting which the efficiencies have and improve.

In the next place, in regard to Cause and Effect we have seen that, if there be the Reality, "Effect," there must necessarily be its efficient Cause. This being so, there are three questions to be asked:

The *first*—Is there such a Reality as an "Effect," or is there real Efficiency? We have answered this already in our present exposition and in that given of Power. The answer is that there is such Reality, as we know by Infallible Cognition.

The *second*—This question has regard to particular things, which may be before us. Is this thing an Effect? If it be an Effect, that which is produced by a cause, there must be a cause, whether we are able to discover that cause or not. It must necessarily be. The answer to the question, Is this an Effect? depends in a large measure upon our own wit and wisdom, our own power of insight into the true character of things and the fidelity, care and skill with which we use it. But after all, the answer must be given by our immediate *cognition* of its character, as to how far it is, or is not a manifestation of Efficiency. As has been fully exhibited, we have the power of such cognition and are in the continual and indubitable use of it. It is our most familiar cognition; we see and know the display of Efficiency everywhere.

The *third* is, how do we know that *all* changes, activities, phenomena are Effects and must have a cause? It is because they are the manifestations, the marks of Efficiency. If a geologist find a fossil fern, he knows that there must have been plant life, for this is its manifestation, its mark; if he find a fossil bone, he knows that there must have been animal life, for this is its manifesta-

Freedom and Responsibility

tion, its mark; if a human footprint on the sand be found, it is known that there must have been the pressure of a human foot there, for this is its manifestation, its mark; and so if motion, activity, "becoming," etc., are seen, it is known that there must be Efficiency, for these are its manifestations, its mark, these are that which it produces; they form the conception which we have of Power; they are themselves *visible, felt* Power.

An Alleged Exception.

An act of the Will is no more without a cause, than is an act of gravitation, or of any other force. The Soul is endowed with "Will-Power," and when there is an act of the Will, it is this power, which produces it, and the time, manner and character of it are due to all the attending circumstances or forces; every thing within the man himself and the external influences bearing upon him. This is not inconsistent with liberty and responsibility.

The *man* is free because there is no violence done to his nature, as an intelligent and voluntary being.

He is *responsible* because his acts are in accord with his own moral character and are expressive of it, and because his moral character is of his own fashioning, due to the use which, throughout life, he has made of his original constitution, his heredity and environment, under the promptings and monitions of his conscience, the Voice within him of the One to whom he is responsible, and who alone can and does determine the exact degree of his individual responsibility. Men may be disposed to call this necessity, and thus endeavor to excuse themselves. But these are unquestionable facts; men know that their acts are according to their character, their circumstances and the inactivity or activity of their conscience, and that God holds them accountable.

To call in a "Causless-Will" is of no avail, this would

Face to Face with God

not eliminate the above-named facts, even if men had such Will its acts would be morally good or bad only by acting according to the moral character of the men, and they would be no longer causeless; moreover, as a known fact men never have used and never do use any such Will, their voluntary acts are *always* in accord with the character and circumstances of those whose acts they are.

The true and sure foundation and measure of man's responsibility is his relation to God, his Maker, Governor and Supreme Judge; it is He who gives each one his original constitution, his heredity, his outward circumstances, the promptings and monitions of Conscience and Duty; and if there seems to be in all this that which militates against moral responsibility, the all-sufficient answer is that the one who makes and holds us accountable is omniscient, all merciful and all righteous. Accountability is a matter of face to face with God and what He requires of us, *being what we are, and situated as we are*. Apart from God there is no accountability. In all His dealings with men as intelligent and voluntary beings, God knows how far, and in what way He may act without destroying their accountability.

The reason why men are responsible for their original, innate depravity is because they stood their probation in Adam, and sinned in him as their representative. This is the only satisfactory explanation which has ever been given of such responsibility.

It is thus evident from the presentation given that the law of Cause and Effect *enters into* and is the *true foundation* of our Moral Responsibility. 1. That for our Native Depravity has its cause in our Representative. 2. That for our personal character has its cause in our life-long fashioning of it, our unceasing character-building. 3. That for our activities has its cause in our own

Creator, Upholder, Ruler

powers or agency, in all that we are in ourselves, and in duty known and enforced by the promptings and monitions of Conscience, the Voice of the One who makes and holds us accountable. Strike out all this Cause and Effect, and our Moral Responsibility is immediately and totally destroyed.

The Great First Cause.

In speaking of "Power," we noted the all-important character of the Truth concerning it in regard to our knowledge of the world, ourselves and God.

Power, as we noticed, is real Efficiency—Efficiency producing its Effects. Upon this depends our knowledge of the World. The world of Nature is one sea of confusion and mystery unless it be a world of *forces* in full activity producing all the phenomena of the Cosmos. It is thus known and understood by all men. Natural Science is simply the discovery and exhibition of things in their causes. We know ourselves only as we know our spiritual and physical attributes; only as we know what we are able *to do* and what we *actually do*. We know God only as we know Him as the Creator, Upholder, Ruler of all things and of all intelligent beings.

We cannot thus know God, and can have no thought of the Reality of the "Infinite the Absolute" without the law of Cause and Effect, Effect necessarily and efficiently bound to its cause; that is without the knowledge of the great Reality of Efficiency.

It is because we cognize Real Efficiency throughout the world and in ourselves that we must seek for the cause of every phenomenon and cannot rest till we reach the Great First Cause of all. Were we not compelled by the law of Cause and Effect, there would be no prompting, no need, no necessity to think of nor to search for a First Cause, and we would have no evidence,

“First Cause” the Infinite Absolute

no proof of any such Reality. But by this law compelled to rise up to it, we are obliged by the same inexorable Law to regard the First Cause of all as, in its own real self, the Infinite Absolute, for naught but *this* can be lifted up above the necessity of having a cause of its own Being over and beyond itself, and this is thus for us exalted, only because it is the Being into whose Mysteries we cannot penetrate, whose dwelling place is the realm where all human thought is powerless and prostrate.

To the Infinite Absolute no rule, nor thought of the finite realm can by us be applied, and in the Eternal Self-Existence of His Being we, as intelligent beings in the highest exercise of our intelligence, rest perfectly content, for all concerning the Mystery of His Nature is for us unthinkable.

Reason imperiously requires us to trace all things else in their causes, but when we reach the Infinite Absolute, the source of all Being, it knows, with an assured knowledge, that it has reached the utmost bound of finite thought, and that it is an act of *unreason* to think of the origin of the One who is unthinkable and to ask for a further revelation of the Secret of His Being than His own outspoken, “*I Am that I Am.*”

We may note that the explanation, which has been given by others of a First Cause, a “Cause without a Cause” is unsatisfactory. Thus it has been said, that we are not constrained to seek for a Cause of Substance. This seems strange and untrue. Here is mysticism again. Why are we not constrained? Moreover, Substance cannot be without its powers and their laws and activities. Hence if *Substance* need not a Cause, the whole Cosmos and ourselves, together with all powers with their laws, activities, phenomena, need no First Cause whatever. The only real need, if there be any,

Questions to be Considered

would be that of an Intelligent Constructor and Ruler of the things *which are*, so far as they display intelligence.

We find still further illustration and confirmation of our explanation of necessary Truths in its application to Right and Wrong and Moral Obligation.

SECTION V RIGHT AND WRONG, MORAL OBLIGATION

Perhaps the most impressive characteristic of Man is that he is a Moral Agent. He has the conception of Right and Wrong and the assurance of Moral Obligation. It is his Duty to do the Right and to avoid the Wrong. And, mysterious as it seems, inseparably connected with this assurance is the feeling of self-complaisance and pleasure when the Right is done, and of self-condemnation and pain when the Right is forsaken and the wrong is followed.

The questions to be considered are—What is Right and Wrong? How do we obtain our conception of them? What is the cause or origin of Moral Obligation and of the accompanying feeling of pleasure and pain within the human Soul? and what is the Moral Argument for the Being of God?

Men have naturally looked upon these things with profoundest wonder, sometimes even with awe. A Great Mystery has been thrown over and around them, not only by men in general, but also by philosophers. The Human Conscience seems to have been often regarded as a Special Gift and Revelation from Heaven, making known unto men their relation to God their Maker, as their Supreme Ruler, Law-giver and Judge. It has been called the Voice of God, as though God were Himself present with, and though invisible, spoke audibly to the Soul and in such a way that it cannot but turn a listening

Conscience the Voice of God

ear. Properly considered, such Mystery may well be encouraged and enforced. In a sense, which is far from untrue and unreal, Conscience is the Voice of God speaking to men, and they should with all sincerity be urged to give heed to and obey its Divine monitions.

“ Oh keep thy Conscience sensitive,
No inward token miss.
And go where ” it “ entices thee ;
Perfection lies in this.”

It is undoubtedly true, that it is owing to this inward Voice of God that man has ever been a religious being. God has not permitted Himself to be forgotten and disregarded of men. This great imperious Reality of human nature cannot be ignored ; it demands and must receive Scientific consideration, as much so as any other of the great realities with which we have to do. To disregard it is to be unscientific.

But while the wonderful character of this Reality, which is so wonderful that it cannot be exaggerated, remains and must remain, a false mystery must not be thrown upon it, as has often been done, in the philosophical inquiry concerning it. It has been spoken of as an “ Inspiration,” a “ Revelation ” within the Soul, an “ Innate Conviction,” a “ Heaven-born Belief,” a “ Native Assurance,” a “ Part of the Constitution of our Spiritual Being,” an “ Original Impress of the Creator upon the Soul.” Such a representation as this we throw aside altogether as being mystic, unscientific and unsatisfactory ; it is itself inexplicable and gives no explanation of the Reality. As an explanation it is inconceivable. It is simply the declaration that we are Moral Agents *because we are* ; we are so made. With creative, miraculous, or supernatural power all things are possible ; but we cannot conceive how our knowledge of Right and

Right the Great Reality

Wrong and our assured *obligation* in regard to them, enforced by the feelings of pleasure and pain, can in any definite and true sense be inborn, or implanted within the Soul at its origin.

The only thing conceivable in regard to original endowment is, that as spiritual beings we have intelligence, emotion and will of such degree, that we are capable of perceiving Right and Wrong as we do other Realities and of being suitably impressed by them when they are perceived, just as we perceive and are impressed by the beautiful, the sublime and the terrible aspects of Nature. Our Moral perceptions and feelings are no more "Innate," than are those which we have of the world of Nature.

In unfolding the true character of Moral Good and Obligation, it must first be explained what is meant by Right and Wrong. The Terms are correlative. We know the one and in so doing, in some measure, know the other. To some degree, they are the positive and the negative thought of the same thing. Between them there is an Eternal, indelible Distinction. *Right is the great Reality*. Conceived of as such in itself it is the *Nature and the Will of God*. Right is Right because God is God. Conceived of in reference to His intelligent creatures, Right is conformity unto the Nature and the revealed Will of God. This is the Eternal, essential and indelible *Reality* of Moral Good.

To know that this Reality *is* and to know *what* it is, we must know that God is and we must know what He is in His own Nature and what He requires of us.

While Right has its Eternal Reality in ^{the}God, Wrong has its reality only in created intelligences. It is that which is contrary to the Nature and the revealed Will of God. Had intelligent beings never been at variance with God, Wrong would have been an impossibility;

Moral Good in Character

there never would have been feelings of self-condemnation, reproach, shame, demerit, with apprehension and fear of consequent evil.

In the next place, such being the essential nature of Right and Wrong, it is evident that Moral Good belongs to and inheres in the *nature* and *character* of men, and is not from and confined to their free, voluntary acts. The expressions used by some writers seem to intimate that all moral good is to be found only in the voluntary acts of what they call Free Will. This is manifestly incorrect.

If our abiding character is in harmony with the Nature and the Will of God, that is the requirements of God, it is Morally Good; and it is this *abiding character* which gives Moral character to our voluntary acts. The voluntary acts of a man, whose abiding character, that is, whose prevailing thoughts, emotions, habits, education, training, tendencies, aims, aspirations are morally good, are good because of this. The voluntary acts of a bad man are bad, because he is himself, in his own character, bad. Every thing depends upon the moral nature, or character which is behind and gives moral character to our voluntary acts. A mere voluntary act has and can have no virtue. It is without meaning and is worthless, as it is not expressive of the man's nature, or character, his intents, motives, impulses. The very same act done by one man may be good and done by another man may be bad. The very same act done by the same man is good or bad according to the thought, motive, impulse, which prompted and determined it, and according to the approbation or disapprobation which he gives it. Until we know what lies back of the voluntary act, till we know from what it proceeds, we cannot tell what its moral character is.

Again, it must be remembered that most decided

Involuntary Acts Good and Bad

Moral character belongs to what we may call "Involuntary Acts."

These are spontaneous, irrepressible, thoughtless, unintended acts. Men often act without deliberate voluntary action, without a purpose, without knowing, or noticing what they say, or do; and often against resolutions and efforts. These acts may be the outcrop of an evil nature against which a man is struggling. They are not as bad as they would be if they had his approbation and were his deliberate action, but they are *the evil expression of an evil nature*; and it is because of this that the individual is grieved who is struggling against it. The involuntary acts of a good man certainly have a good moral character and those of a bad man a bad moral character.

Again, if Moral Good be confined to our voluntary acts it is placed under the control of the Will, as though we were morally good, or bad according as we "will." This is far from true. No man ever has made and no man can make himself good, or bad, by his Will. This would be miraculous power, equal to moving mountains by an act of the Will. He can make himself good, or bad, only indirectly, by long continued education, training, discipline, struggles; he must *gradually build up* a good or bad character; and he never succeeds perfectly; evil will still cling to the good and good still refuse to be absolutely destroyed in the bad man.

Still further, Moral Good cannot be confined to Free Will, because this involves a wrong view of the Will and of Freedom. The man is a *free-agent*, but the Will *itself* is not free. It is no more free than are the other attributes of the Soul, emotion and thought. All the attributes of the Soul act and react together as do the forces of the material Cosmos. They are inseparably bound together in united action, and every act is the

Moral Good not from Free-Will

resultant of them all acting together as a unit. Our voluntary acts are of this nature. They are the result and the expression of all that the man himself is in his endowments, nature, character. The Will has no choice, nor determination, it is simply Executive Power. By it man puts *himself* into execution; his thoughts, motives, feelings, wishes, character, purposes, as we point out in the chapter on the Will. Our voluntary acts are all determined by what we ourselves are, otherwise they would be without meaning, and thoroughly worthless, neither good nor bad.

So far from proceeding from Free-Will, or from man as a free-agent, Moral Good resides in the man's nature, in his formed and established character, which the Will does not, and cannot determine and which the Will does and must obey; the obedience is oft-times against our better resolutions and our earnest desires. We do wrong repeatedly in spite of ourselves, our own evil nature compelling us.

There is at times apparent contradiction in regard to the Will in the minds of many. They often say "We act against our Will." But the act is itself an act of the Will. How then can the Will act against itself? The difficulty arises from wrong thoughts as to the Will. Choice and determination are attributed to it instead of *only executive power*. Preferences, wishes, determinations, resolutions, choice all belong to other attributes of the Soul. Wishes, preferences, "pleasure in" belong to the emotional attributes. Determinations, resolutions, conclusions, etc. belong to the Cognitive attributes; they come from reasoning, comparing, weighing, considering, judging, and the Choice made is from all these acting together, the resultant of the activities of the emotional and cognitive attributes. *Choice* is the wish, preference rationally selected and determined upon. This

Imposes Obligation

is then *executed* by the action of the Will. Hence we may have a Voluntary act which is against not the Will, but against our Choice, that is against the thing selected by our own wishes, or preferences, reasoning and determination, apart from other considerations, or influences.

This presentation of the Will as only *Executive Power* makes it all the more clear and definite that Moral Good does not proceed from, and is not confined to its acts.

In *the next place*—Moral Good, being conformity to the Nature and Will of God and residing in the nature and character of the Soul, imposes Obligation. It is supreme, imperious; it enjoins Duty and enforces its requirements with rewards and punishments. It refuses to be banished, or effectually suppressed. This is the marked and ineffaceable characteristic of Moral Good within the human Soul and is universal among men. Men know that they are under obligation, that it is their *duty* to observe the rule of Moral Good and that they carry within themselves the reward of being and doing right, and the punishment of being and doing wrong; they have the most decided thought and feeling of merit and demerit, of Personal good and ill-desert.

Another most marked characteristic of all this is that Moral Good and Obligation are inseparably connected with the thought and assurance of God. This is so truly the fact that this latter is essential for the former. That, which is called Conscience, takes its character and its very being from the thought of God. As the thought of God varies, so does Conscience vary within individuals. Those whose thought of God is low and mean, unworthy, crude, have a Conscience of a corresponding character. Those whose, whole Soul is expanded and glorified by a thought of God exalted, sublime, have within them a Conscience like unto this soul elevating conception.

Conscience depends on God

The Conscience of the Christian, inspired with the knowledge of the Living God revealed in Christ, is what is truly named an Enlightened Conscience, differing from that of the ignorant and the debased as day differs from night.

Moreover, it is a familiar fact that among men around us their Conscience rises and falls in reality and power with their rising and falling belief in God. Where faith in God reigns supreme there Conscience holds sway; as skepticism and infidelity enter Conscience grows feeble and dies out. The reason why men cannot completely eradicate Conscience from within them is because they cannot rid themselves of all thought of God; and when the moment comes that God reveals Himself to those who have long shut their eyes and darkened their minds, Conscience awakens from slumber with overruling, crushing power.

It is because of this essential thought of God in Moral Good and Obligation that Conscience is, and may truly be called, the Voice of God within the Soul. Byron speaks of it thus, "Conscience is the oracle of God." And this affords that which is regarded as one of the strongest and most impressive proofs of the Being of God. This is called the Moral Argument and is one which is appreciated by all men.

By Conscience we are not to understand a special attribute, or combination of attributes, nor a peculiar endowment of the Soul, or constitutional character, or innate conviction. It is simply the activity, experience, or phenomena of ourselves as spiritual beings sufficiently high in rank of intelligence, emotion and will to perceive and appreciate the revelation of God, which is given to us.

There *is* the Great *Reality* of Right, and the *Reality* of Wrong, and in regard to these we stand as we do to

Not a Special Attribute

all Realities spiritual and material within our reach. We perceive the Realities of the Soul and of the world of Nature and have emotions due to the perception of the wonderful, the sublime, the beautiful, the pleasing, the terrible, the commonplace. So also we perceive the *Realities* of Right and Wrong and in so doing experience emotions due to the perception of these. Thus to *perceive* and *feel* is to have Conscience. To be blind to these things and hence without the corresponding emotions is to be without Conscience.

We have been speaking and shall continue to speak of Conscience in the highest and true sense of the word. There is a lower form of it, in virtue of which men deal rightly with one another without thought, or care of any thing beyond. But even this has its real foundation and its true strength and reliability in Conscience towards God. Its standard is the nature of God and His requirements of man in relation to his fellow man, and the established rules, laws and recognized proprieties of human society, and the natural necessities of human nature, man's dependence upon and need of others and also each individual's own regard to his position, his property, his own wishes and demands.

Having made these statements of the true character of Moral Good and Obligation within the Soul, we have now to unfold the origin of it among men; an origin which has made it necessary and universal.

Origin of Moral Obligation.

The Soul of Man comes into Being with the full endowment of all its attributes and laws, but as immature and undeveloped as was the original, attenuated, motionless, dark Nebula, which has developed or evolved into the present Universe, the Cosmos. Thus coming into Being, it was in vital union with the microscopic, imma-

Man's Dependence and Relations

ture, material germ or organism at the very incipience of its existence. The spiritual and the material develop together and the man is born into the world. As he derives his origin from Creative power, so also he has from the same source his entire environment and consequent experience.

Being by original endowment of sufficiently high rank in intelligence, emotion and will to be a Moral Agent, he developes into such by reason of the environment which is his from birth to death, and is a Moral Agent of greater or less superiority according as his environment from beginning to end is more or less favorable for Moral superiority, and according to the character of his own response to or use of it.

That which distinguishes the human infant above the offspring of all other creatures is its helplessness and its long-continued dependence upon parents or others; and the conspicuous characteristic of humanity is the closeness of the bond by which man is bound to his fellowmen in families, communities, tribes, societies, nations and the one great world of mankind, the common Brotherhood of Men. No man liveth to himself, no man dieth to himself, every individual is of necessity a member of the one family of Man where every individual is dependent upon all the rest; where all are related with intimate and manifold relationships; where all mould and fashion one another in character, experience and conduct; where all struggle together in the ceaseless strife for mastery and gain, subduing and being subdued, defending themselves and property, favoring friends and executing vengeance upon all opponents; and where of necessity authority and rule prevail and are maintained and enforced by rewards and punishments; and where, invisible yet ever present and made known, God controls and overrules.

Moulding, Fashioning Power

From this men never have been and can not be free; and this is the *Moulding, Fashioning Power* by which men are developed necessarily into Moral Agents, and according to the plan and purpose and working of the Great Creator.

The development reveals itself and may readily be traced from its beginning. Man, being what he is, as just pointed out, is born into the world perfectly helpless and utterly dependent. This is his first consciousness, a consciousness long continued and mightily bearing upon him during the most impressible and the formative period of his experience. This consciousness involves that of parental supremacy, authority and control, with the enforcement thereof by rewards and punishments. This appears with the dawning intelligence of the infant. His earliest experience is delight in a mother's smile and aversion to her averted face or frown. This is deepened and strengthened as the years roll on, oftentimes even to young manhood. This is his world in which he lives, the only one which he has known, the world which has *fashioned* and *stamped* his very being, into conformity to which he has grown, and for which alone he is fitted. Such dependence, with all that it involves, he regards as a "matter of course," the established state of Nature. The definite experience which has thus fashioned him, which is his earliest remembrance, which has held him from infancy to manhood, he can never destroy.

This contains within itself all the essential elements of Moral Good and Moral Obligation; dependence, supremacy, authority, control, duty, obedience enforced by rewards and punishment, the delight in the one, the fear of and shrinking from the other. Let God take the place of parent and the work is complete, the Moral Being in the true and highest sense is developed.

Hence the importance of parental training. If the

Later Experience of Men

child be wayward and ungoverned, caring neither for the smile nor frown of the parent, he will have no conscience toward God. As is his attitude to the parent so is his attitude to God. During infancy and earliest childhood the parent is God to the child; but there must be no usurpation on his part of the Divine Throne; with dawning intelligence the child must be directed Godward.

All the later experience of the individual is of such a character as to confirm and give further development to the impression already made even in the rudest stages of human society. Entered upon manhood, the individual finds immediately that of necessity he must either rule or be ruled in the world's battle, in the struggle for existence. In fact he both rules over some and is himself ruled by others; it is true of every one that he is both Lord and Servant; and both of these alike develop the Moral character. So far as he has the mastery he is conscious of all the elements of a Moral Agent. He is supreme over others; they are dependent upon him; his is authority, control; he commands and enforces obedience by his favor and displeasure, rewards and punishment; he imposes the sense of obligation, duty, towards himself, of merit and demerit with desire for and delight in his approbation and fear of his wrath. He esteems also his own rights and privileges and property, resents all encroachment upon them and requires the acknowledgment and respect of them from others; in his thought and esteem such acknowledgment and respect are *right*; all encroachment is *wrong*;—the right is that which ought to be; the wrong is that which ought not to be. Whatever be the social position of men, from king to peasant, this is essentially on some scale the experience of all.

The reverse of this is equally true. So far as the individual, instead of having the mastery, is himself mastered

Individually and Collectively

he has the correlative experience and its correlative moral development ; the man learns duty and obedience, and seeks to gain favor and to escape from displeasure.

Again, if and when the individual becomes a father he is conscious of being in himself all that he once regarded his parents as being in their relation to him, and he develops within his own child the very same character, attitude and conduct which were originally developed within himself in his own childhood experience.

All thus far presented is the statement of facts which can neither be denied nor explained away, and which prove conclusively that the conception of dependency, supremacy, right and wrong, obligation, oughtness, duty, merit, demerit, desire for and pleasure in favor, fear of and shrinking from displeasure, is developed within men and made most familiar and indelible by the environment and consequent experience from infancy throughout life which are theirs, and which must of necessity be theirs because of infantile helplessness and dependence and because of the relations by which men are bound to one another.

Still further, that which is true of men individually, is true also of them collectively as communities, tribes, societies and nations. In these there is necessarily the supreme power, with its rights and privileges, its prerogatives, its authority, its control, its laws, its requirements, its rewards, its punishments, enjoining duty, enforcing obedience, holding and defending property, regarding all encroachment upon its possessions, its authority, its honor, its privileges as *wrong*, and all acknowledgment of and respect for these as *right*, impressing fear of its displeasure and desire for and delight in its favor. Here again, we have all the experience as to Right and Wrong and Obligation, had in infancy and childhood, enlarged and enforced.

Presence and Manifestation

As thus implanted within the Soul, the Conception of Right is that of *conformity* to the *character* and *requirements* of those *above us*, upon whom we are dependent, who have authority and control over us, enjoining obligation, duty and enforcing obedience, and whose favor is our well being, our life and whose displeasure is our destruction, our death, whose favor we consequently seek and whose displeasure we strive to avoid.

But there is, as already mentioned, *another essential element* in the environment of men from infancy throughout life, and that is the Presence and Manifestation of God. God has always been present with men and has so manifested Himself that they have ever been without excuse if they deny Him; and they never have been able to destroy within themselves the thought and the assurance of His Being and Presence. To men in general God has revealed Himself in Nature, including the human Soul, and in so doing has made Himself known as the Supreme Being, the Creator, the Ruler of all, the one upon whom all are dependent, in whose power and at whose disposal all men are, whose favor is life, whose displeasure is death.

This thought of God being the life-long familiar one, the one from which men cannot escape, all the conceptions of Right and Wrong and of Obligation, of rewards and punishments due to man's environment and experience from infancy onward are thereby taught and enforced in a higher sphere, and men are lifted up into Moral Beings in the true and full meaning of the words. And this Conception of Moral Good and of Moral Obligation is raised to its highest character in the minds of men when they learn to know God in the brightness of His Glory, as revealed in Christ; theirs is then a Conscience towards God enlightened with His Light.

This Explanation of the Origin of Moral Obligation,

Of God in Nature and in Men

together with the conception of Right and Wrong is free from mysticism ; it is the statement of indisputable facts ; it does explain that origin, and in a reasonable, thoroughly scientific manner ; it meets all the requirements of the case, presents Moral Good as inherent in the abiding character of men ; and referring man's rank in intelligence, emotion and will, and also his environment, including God's manifested Presence as an abiding, essential element thereof, from infancy to end of life, to the plan and act of the Creator, it makes, *in very deed and truth*, Conscience to be the *Voice of God* within the human Soul, the Divine Oracle within, which men have always heard and which they cannot effectually silence.

It is a known fact that there is a self-evident manifestation of God in Nature, including mankind, which men cannot help perceiving and that such is its character that it induces within them Conscience, with all its essential elements. When men look forth upon Nature, they can not help perceiving the display of mighty power, before which they are utterly helpless, a power at times wonderfully beneficent, life-giving, with harmony and beauty everywhere ; at other times terrific, destructive with wide-spread desolation and death.

Fire leaps beyond control, runs over plains and through boundless forests with irresistible and appalling might from which men and their habitations cannot escape ; tempests by sea and land sweep all before them to irreparable destruction ; floods make havoc of all things, tossing and rolling onward. Lightning seems omnipotent as it strikes and destroys at pleasure and with its reverberating thunderings is awe-inspiring. The Extremes of heat and cold are alike inimical, the regions where they hold sway, the treeless, boundless equatorial plains, the lakes of liquid fire within and flowing from volcanic craters, the far north and south, the

Indelible Impression of

cloud-piercing mountain peaks covered with perpetual ice and snow, are impenetrable under pain of imminent death. The clouds, the sky, the stars are beyond the reach of man's utmost effort and seem the dwelling place and expression of powers infinite, mysterious. Men know themselves to be the very sport of such powers thus seen everywhere around them, less than dust particles in the whirlwind. Yet these very powers, fire, wind and water, heat and cold and mystic electric force, all combine to administer to his comfort, his well-being, his very life, *without them he cannot be*; and the high altitudes of clouds and upper air and skies and the infinite expanse of the overarching star-lighted heavens have a beauty, grandeur, splendor, serenity filling the minds of men with peace, confidence and trust in the Being of the One dwelling within these and above them.

Thus inspired from without, men know from the inspiration within, from the consciousness of their own spiritual selves and of their necessary relations with their fellow-beings, that the Supreme One revealed by the activities and the aspects of Nature is a Spiritual Being in fellowship with men, maintaining His exalted honor and requirements with goodness and with severity.

Because of all this men have indelibly impressed upon them the assurance of a Supreme over-ruling Power from which they cannot escape, governing them at pleasure, whose favor is life, whose displeasure is death; conformity to whom and to whose requirements is Right and want of such conformity is Wrong. Right is Right because God is God; Right is the Great Reality which all men see because they *see* everywhere around and within them the Manifested Reality, Presence, Supremacy and Character of God; a manifestation which they cannot help seeing, and the moulding, fashioning power of which they must of necessity experience.

a Supreme Over-Ruling Power

Thus Conscience is evoked; and because it is *thus created* within men, divinely made for its indwelling and activity, it is the veritable *Voice of God* within the Soul of Man, unceasingly, irrepressibly audible.

We have been speaking of Conscience in its natural aspect and purely scientifically. In a far higher and additional aspect it may be called the Voice of God, because of the direct communion of the Divine Spirit with the human Soul; but this is the supernatural.

The Moral Argument for the Being of God is here introduced to the best advantage in immediate connection with this presentation of the Manifested Presence of God evoking Conscience within the Soul. And in its true character in the light of the explanation, which we have given, of the Origin of Moral Good and Obligation, it will be seen to be better and stronger than in the form in which it is ordinarily presented. Thus abundant provision is made for it by all that we have said, and additional confirmation given to our explanation.

The Moral Argument for the Being of God

This is of great practical value. It is this, perhaps, which above all others, though by no means necessarily in argumentative form, which binds men to God. Conscience is universal among men, among all classes and conditions of men. It is necessary, ineradicable. No ignorance nor depravity can extinguish it, no learning nor culture can destroy it; it holds men in its omnipotent grasp in their most frantic efforts to escape. Hearing God's Voice within, men cannot deny that He lives and reigns.

The Fact of Conscience proves the Being of God.

This is the argument in its simplest, most practical and, perhaps, most efficient form. For proof of God's Being we may refer each one to his own Conscience.

Thou God Seest Me

But the Question arises, how is the fact to be explained, or how may the argument be presented more at length? As often given, the explanation and argument are mystic and unsatisfactory. Thus Moral Obligation is often represented as, in some sense, a supernatural revelation of God within the Soul. It is the impress of the Creator upon His work; or Conscience is something In-Born, an Innate Belief, an Original Conviction, a Heaven-Given Endowment of the Soul.

Rejecting all these as mystic, unscientific and unsatisfactory, we may present the argument in one of its prevalent forms. As man has the Conception of a Supreme Being whom he is bound to obey, there must be a living God corresponding to this conception; or thus, It is indubitably true that there is Conscience in Man and from this it is fair to infer that God is. His Being is necessarily involved in Conscience, for the very idea of Conscience is that of accountability to a Supreme Moral Governor, who rewards and punishes; and Conscience depends upon the assurance of God, it is dull and dead if there be denial of Him, but it awakens all alert and overpowering with the thought "Thou God seest me." This argument is positive unless human nature is a falsehood, which we cannot persuade ourselves to believe. If there be no God, Conscience is a mere subjective affection, compelling us to believe in that which is not and filling us with hopes and fears which are illusive. Moreover, the only way in which we can explain Conscience is, that it is due to One to whom it looks and upon whom it is dependent. The argument, however, as thus stated gives no explanation *how* Conscience is produced within us; and it might be claimed that there is no *proof*, that our Nature is not deceptive, and that there may be and are those who regard Conscience as a superstition.

The Great Realities

Hence the advantage of the Moral Argument in its stronger form afforded by our exposition of the Origin of Conscience within men. It is founded upon the two established facts upon which we have dwelt—*The One* is the rank of man as a Spiritual Being, and his total environment, from the helplessness and dependence of infancy onward throughout life, in his relations to his fellow-men developing him into a Moral Agent; and the *Second*, the Presence of God indubitably manifested as the Supreme One before whom men are absolutely helpless and dependent, a Manifestation efficiently lifting men as Moral Agents up to God.

The Argument is that this Manifestation of God *must* be *real and true*, because, as we have pointed out, it is suitable to and *does necessarily and universally cause* men as moral agents to look up to Him as their Supreme Ruler. Here we have a *known effect* produced by a *known cause*. The reality of the effect *proves* the reality of the cause. The only Question which can arise, is—May there not be this Manifestation of God without any corresponding Reality?

There is no such possibility. The Manifestation itself would need to be accounted for and would remain inexplicable; an effect without a cause.

We are face to face with Realities. *These are the great Realities*—Ourselves are Living Persons, we are Moral Agents; we look up to a Supreme Ruler; of Him there is a Manifestation everywhere around and within us which necessarily and universally causes men to bow before God in conscious dependence and obligation, and for God, with this *efficient* manifestation of Himself, the crowning Reality of all not to be is well nigh, is indeed altogether unthinkable.

In the next place, our Explanation provides for Moral Good as inherent in the abiding character of men. Men

Moral Character

are in their own character morally good or bad. In the *first* place, they are Moral Agents. Such is their rank as Spiritual Beings that they can know God as their Supreme Ruler, whom they are bound to obey and towards whom they may have corresponding affections.

In the *next* place, Moral Good being conformity to God's nature and revealed Will, men are in character Morally good when their character, that is their prevailing and abiding thoughts, emotions, principles, wishes, aims, habits, disposition have this conformity; and they are in character Morally bad when there is no such conformity. Or, in other words, the human Soul, the man himself is morally good or bad according as he is, or is not in himself what God would have him be.

Moral Good being thus inherent in the character of men, their voluntary acts are good or bad according to the character of the man whose acts they are. It is the man's moral character which *gives* moral character to his voluntary acts; otherwise they are neither good nor bad.

Self Approbation—Self Reproach

Our Explanation also accounts for the feelings of Self-Approbation and Pleasure in right-doing, and Self-Condernation and Distress in wrong-doing, although these have been regarded as of the deepest mystery.

Moral Obligation is enforced by rewards and punishments from the Power to whom the obligation is due. Right-doing is, therefore, inseparably associated with the thought of happiness, and wrong-doing with the thought of misery, though the former may be only the smile and the latter the frown of the Ruling One.

When we do right we know that we have the approbation and when we do wrong we know that we have the condemnation of God, and the assurance necessarily

Rewards and Punishments

gives us peace and hope, disquiet and fear; and it is a soul-elevating thought for us to entertain, "I am approved of God," and a most distressing one, "I am at variance with my Maker and Final Judge."

It may not be objected, that self-gratulation and self-reproach are experienced by men who do not think of and do not care for God. Notwithstanding this it remains true, that God and His Rule are the foundation of Right and Wrong and of all that flows forth from them; a Truth universally recognized by men and from the influence of which no individual can altogether escape, as he passes from infancy to manhood and onward.

Moreover, even within the most thoughtless and careless, these inward feelings of self-approbation and self-reproach spring into new life and power as the thought of God enters the mind. And, even though the individual think not of God, he must necessarily have some standard of Right and Wrong with which to measure himself and claim approbation from his fellow-men and from within; and that standard must be that of the world in which he lives and by which he has been trained and fashioned. According to that standard all right-doing is praiseworthy and all wrong-doing is ill-deserving, and this standard is in truth founded upon the world's knowledge of God. The individual has, therefore, in doing right the approbation of his fellows and of himself, and in wrong-doing their disapprobation and his own self-reproach.

Moral Good and Obligation in Animals

It is of interest to note the relation of Animals to Moral Good and Moral Obligation.

How far are they Moral Agents?

There is a wonderful and striking correspondence between animals and men in their nature and experience.

Animals Immature Moral Agents

Animals are true spiritual beings; they have intelligence, emotion and will as truly as ourselves. They are born into the world helpless and dependent; they are under parental care, protection, rule and discipline; they are taught and compelled to obey both by rewards and punishments, and learn to delight in the one and to fear and shrink from the other. Here, therefore, are all the elements of Right and Wrong and Duty.

Their further experience confirms this. Bound together by varied relationships, there are rule, and obedience among them. Individual animals, moreover, recognize and maintain their own rights and privileges against all encroachments with severe penalties; they defend their own habitations, their mates, their young, their food and, oft times, even their own dignity.

This experience and development is lifted into a higher sphere by the presence and rule of man. Even wild animals look up to him and fear to trespass against him. Among domestic animals the elevation is more marked. Trained animals, the elephant, the horse and especially the dog, know what man requires and what *they ought* to do. To the dog his master is as God; he looks up to him as supreme, seeks and delights in his favor, fears his wrath and has his perception of duty enforced by rewards and punishments.

And this Morality inheres in their *character*. As regarded by men and by themselves animals have a good and a bad character. They are friendly and gentle and they are vicious; they are favorites and well-treated and are disliked and ill-treated both by men and by one another. Thus there is Animal Moral Good and Bad character.

We have before noted, that animals are not high enough in rank to be called Persons, so here, again, they are not high enough in the rank of spiritual being and

Moral Necessity Explained

experience to be called Moral Agents, but they may be regarded as immature or incipient Moral Agents. But they can never mature into such; their low rank as spiritual beings forbids and prevents this. They can *never rise higher* than that which they are by *original* endowment.

The Necessity Attached to Moral Good and Obligation

The reason why Moral Good and Obligation is a necessary and universal Truth is given by our Explanation.

The knowledge of these is necessary and universal among men, because men, being what they are and cognizing the Realities which are and which evoke their corresponding emotions, must of necessity cognize these Realities and experience the emotions which they produce. It is a contradiction for them to cognize the Realities and experience the emotions which they produce and not to cognize the one nor experience the other.

And the reason why all men know that Right and Wrong are Right and Wrong always and everywhere is because it would be a contradiction for it to be otherwise. These Realities cannot *be* and *not be*. Wherever they *are*, there they must necessarily be.

Again, the reason why men know that Right is everywhere and always meritorious, and Wrong always and everywhere ill-deserving, is because it would be a contradiction for these not to be thus. Right *is* that which *is meritorious*—Wrong *is* that which *is ill-deserving*, for they are conformity and want of conformity to the approbation of the Ruler. Wherever they *are* there *must* the approbation and disapprobation be.

When and wherever men see an act, which has to them self-evident marks of that which they know as Virtue, they must recognize it as such and as well-deserving, for where Virtue *is* there it must be and there it

Man a Religious Being

must of necessity have all that which belongs to it as Virtue.

Moral Good is necessarily connected with happiness and Moral Evil with trouble because Moral Obligation, Duty, is enforced by rewards and punishments and is meritorious. Right-doing *brings* self-approbation and God's favor; Wrong-doing *brings* self-reproach and Divine punishment.

SECTION VI RELIGION

Religion is one of our Intuitions. All men know Intuitively what Religion is. It is one of the great characteristics of Man. Man has been defined A Religious Animal. This, however, is very objectionable. Strictly speaking Man is not an animal, neither in Soul nor Body. He is a human Spirit in vital union with a distinctly human Body. He might be called a Religious Being, among the beings of this world. He alone is high enough in rank to be religious.

We have a religious Nature and a religious Life; this latter is often most crude and simple, and well nigh utterly suppressed, but it struggles on against all adverse influences and lifts itself above surrounding spiritual wreck and ruin, as though it were a deathless thing. The history of mankind, moreover, is largely the history of Religion.

The derivative meaning of "Religion" is "that which binds." It is that which binds man above all things else, it is his "*Supreme Duty*." One of the best Definitions ever given of Religion is the answer in the child's catechism to the question, What is your Duty to God? "I must first learn to know Him and then I must do every thing to please Him." It, therefore, has its two aspects, the inward and the outward. It consists in the knowledge of God and the proper disposition

Religion Monotheistic

towards Him and outward service. This latter is "Cultus," worship, adoration, praise, thanksgiving, prayer and obedience in the doing of His commands and appointed work.

Though Man as Man is religious, the individual may be irreligious, because he may rise in rebellion against Religion and seek to live regardless of it; but this is the introduction of discord and is destructive of true manhood.

There can be no true manhood and womanhood without Religion.

It is almost identical with "Moral Obligation," as we have unfolded it, that is "Conscience towards God," Duty to God being its essential character. Religion may be regarded as the efficient and practical Aspect of Conscience. Man's Nature is Religious, *because* moulded and fashioned by Conscience, and being thus fashioned, its outward expression is "Cultus," worship, service.

Man has the knowledge of God and the experience of the corresponding emotions which it produces, reverence, love, fear, obedience, desire to please and to seek God's favor, and he is thus prompted and impelled to live the life of a worshipper and servant of God.

And as Conscience is, as we have pointed out, Conscience towards a Personal, Supreme Ruler, Religion, springing as it does from it, is in its true form and as a matter of fact in its original and in its advanced development Monotheistic, the knowledge and worship of One Living Personal God.

Because Religion thus springs from Conscience, the Theistic Argument founded upon man's religious Nature and History, to which great prominence is being given at present, is in fact a form of the Moral Argument.

Man's Religious history proves his Religious Nature; his Religious Nature proves his Moral Nature, the *effi-*

Religious Theistic Argument

cient Reality of Conscience within him, and Conscience affords the assurance of a Personal God.

As thus presented the Religious Argument loses nothing of its power and value, but has these augmented, as it explains the origin of Religion within the human Soul, instead of referring it to a mysterious, inexplicable, innate Instinct.

The Established Explanation of Necessary Truths

Thus by all the illustrations which we have given and by the application of the Truth in explanation of different problems we have made it evident, that the Necessity attached to all Necessary Truths is founded upon and springs from the *Law of Non-Contradiction*, which is itself known by *Immediate Cognition*.

We now pass to the consideration of the Will, our Intuitions of Executive Power, Freedom and Responsibility.

Intuitive Perception

CHAPTER IX

A New Exposition of the Will

A CEASELESSLY ENERGIZING FORCE

THE EXECUTIVE POWER OF THE SOUL

THE HARMONY OF VOLUNTARY ACTIVITIES AND THE INTUITION OF CAUSE AND EFFECT

Preface

THE Exposition presents 1. The Reign of the Law of Cause and Effect within the Spiritual Cosmos.

2. The Will as simply the Executive Power of the Soul. It urges Self-Execution as superior to the term Self-Determination, which may imply that which is erroneous.

3. The Relation of the Will to the Material World in harmony with the law of the Conservation of Energy. It is that of Authority and Obedience. This is at present almost entirely confined to the nerve-force. The Creator has so constructed it and so endowed the Soul, that the former obeys the latter. When men utilize this nerve-force and thereby their muscular force and by it the other great forces of the world further beyond, they simply *direct*. Their Will is the *rule* by which the physical forces act. In *all their activities* these act under governing rules. How these rules are imposed and how they act is an impenetrable mystery. In like manner, the physical nerve-force acts under the *rule* which gov-

erns it, its rule being the Will of the indwelling Soul, though how *this* rule is imparted is as deep a mystery as in all other cases, but no deeper. The Soul wills, the nerve-force obeys.

This authority seems to be precisely that of which we are conscious. We are conscious that *the rule* under which the muscular force acts is simply the mandate of the Soul. Rightly considered, man within his sphere is a Miracle Worker; his Thought and Will dominate the World. All his manifold works are wrought by *physical* forces, not by himself; he the Architect, they the builders.

All this is in accord with Nature. If I by Will-Power stop and hold in the air a ball thrown to me, I no more violate Nature than if I caught and held the ball with my hand. In both cases alike another force has acted upon the ball and produced the effect. When the Will is withdrawn the moving-energy and gravity again act and the ball goes on its course. In the other case, when the hand is withdrawn gravity alone acts and the ball falls straight to the ground; the moving-energy has been transmuted through hand and body. (Pages 188, 191.)

4. It explains our Spontaneity. This is not an absolute *Initiation*, but the manifestation of powers *already* and *ever-energizing*.

5. Gives ample room for Freedom and Responsibility. The activities of the Material and the Spiritual Realms are both those of ever-energizing powers and in both cases the powers act and react upon one another. Beyond this there is a vast gulf of separation between the realms. The activities of the former are those of *material* forces, Those of the latter are the activities of a *Living Person* of a *God-like Being*, the activities of thought, emotion, volition.

It is from these God-like Powers that man's responsibility springs.

The fact that these are ceaselessly energizing and act

and react upon one another in no degree impairs responsibility.

NEW EXPOSITION

The problems of the human will are perhaps the most interesting and difficult of any which have ever been considered. It may be said that in a large measure they have remained unanswered. Among them is that of the relation of the will to the universal reign of the law of causation. How shall this be set forth and explained? We think that it may be by a new exposition of the will, which we here present.

That volition is not contrary to, but acts strictly according to the universal reign of causation may be made evident as follows:

Man is a real independent agent. The human soul is endowed with real energy. Just as the material substance has its inherent forces, so also has the spiritual substance, or spirit, its inherent forces, or powers. The various powers of the spirit, such as thought, emotion, desire, will, act and react upon one another, and thus guide, control and determine their activities, so that at one time they may all be in activity, and then again greater activity may be given to some rather than to others, and at times some may be held in a state of rest through equilibrium; in all this corresponding to the mutual activities of the varied forces of the material world, where at times violent activities and reactions occur, and at others, equilibrium prevails through the counterbalancing of equal forces.

Moreover, the man's environment is the occasion, the prompting, the external cause of the spiritual activities within. The spirit's energizing is its own self-determination, but responds to and corresponds with that which is without. The man's thinking, feeling, desiring and willing are his own exercise of his own inherent energies,

but his thoughts, etc., are what they are because of that upon and under which they act, the sights, sounds, etc., and influences of the world in which he lives.

The forces of the material world are always in full energy; the rest which extensively prevails being due only to the equilibrium of the energizing of opposing forces. So the powers of the spirit are always in full energy; the greater or less manifestation of activity being due to the degree in which the various powers are held in check by another, or allowed full play.

The human spirit must, therefore, be conceived of as being ever energizing; should this energizing cease the spirit would cease to be, and, as is the case with all material forces, should one power of the spirit fail to energize, it would no longer be a power; it would be lost to the spirit. This unceasing energizing of the powers of the soul being under the control and direction of the various faculties wherewith the soul is endowed, gives rise to all our inward, or spiritual experiences, or doings. The man thinks, and as he thinks, he wills to think with greater or less concentration upon certain objects of thought, in as much as the powers of thought are under the control and direction of the will; and as he "wills" he does so according to his thoughts, in as much as his will is under the control and direction of the powers of thought. And as the man thus thinks and wills his emotions are aroused, or depressed by his thoughts and volitions, as the emotional powers are under the control and direction of those of thought and volition; and he thinks and wills according to the character of his emotions, because the powers of thought and will are under the control and direction of those of emotion. And as he thus thinks, and wills and feels, his desires or aspirations are aroused, or depressed according to the character of his thoughts, volitions, feelings, because these control and direct them; and on the other

hand the thoughts, volitions and feelings are determined by the desires or aspirations, in as much as these latter exercise their control and direction over them.

Thus it appears, that the "will" is but one of the powers of the individual man, and being a real force, or power, it is always as such in full energy, as is true of all powers spiritual and material, and being ever in full energy, that is, ever fully energizing, or exerting its force, and being under the control and direction of the other powers of the soul, it is quiescent or active and acts in this direction or another according as it is repressed, or allowed to act, and is directed by these powers.

In other words the man, not an entity apart from the faculties of the soul, but an agent, or the Ego, to be thought of as consisting of these combined faculties, having this will energy, or power, uses it by willing or not willing, or forming resolutions of one kind or another, according to his own thoughts, feelings, desires, etc. The man utilizes his will energy as the engineer utilizes the steam power which is at his disposal.

As thus far presented it is evident that "volition" presents no contradiction to the universal reign of causation. It no more contradicts it than does the engineer's use of steam power. Equally in both cases there is the presence and the utilizing of a force. The engineer has the steam energy, which he uses as he pleases—the man has the "will-energy" which he makes use of as he pleases. In neither of these cases is there anything like a new creation, an unaccounted for action, a coming of something out of nothing, spontaneous activity, as volitions are often said to be with the insuperable difficulty involved; for in both cases there is the presence of a pent up energizing force, ready for use; the steam, whose energy is held within the steam-chest, and the will-power, whose energy within the soul is held by the

powers of the soul, ready to be used by the individual man.

Thus far there is no difficulty whatever, and if we be content to accept facts as they are at present, there is nothing more needed to be said, or desired. We may rest satisfied with understanding how our volitions are under the law of causation. Every effect must have its adequate cause, our volitions have their adequate cause. They are produced by the ever energizing will energy or force, which is one of the powers of the soul, just as the working of the engine is produced by the energizing steam power, and they come and go and are of this or that character as controlled and directed by the man, just as the working of the engine is according to the control and direction of the engineer.

But two difficulties arise if we look beyond present facts, in the light of what is supposed to be true of the material world; the one is the final cessation of all activity of the soul through the equilibrium of all its powers, and the other the exhaustion at last of the will force, through work done by it outside of the soul in the material world. In regard to the first of these difficulties, it is to be remembered that the hypothesis is that, viewed with the widest range of vision, the material universe is, as it were, a great mechanism in full activity, but which is steadily running down, and which will finally cease to move. According to the law of correlation and transmutation of forces, no force is ever lost; they are ever acting and reacting upon one another, but with a constant trend towards a universal equilibrium of opposing forces and a state of perfect rest.

The primitive, indefinitely attenuated and diffused nebulous matter by a process of condensation brought the varied material forces into activity; motion, heat, light were produced; suns and planets and systems of worlds were formed with their revolutions through wide-

sweeping circuits; successive changes have taken and are taking place within suns and satellites, through cooling and contraction; stage after stage passes away; the varied forms of life appear; step by step the worlds grow cold and dark and dead, and at last all forces come to a state of abiding counterbalance, and universal darkness, cold, solidity and rest prevail; unless through crash of worlds with worlds, or in some other way, the solidified matter becomes the attenuated and diffused nebulous material once more.

As far as known, it is thus with the material world, and it may be supposed that a corresponding process is within the spiritual world, that is, within the human soul. It begins with its endowment of powers, as does the material universe, but with these in abeyance, or inactivity, as is the case in the realm of matter. These powers gradually act and react upon one another and under the law of conservation and transmutation of spiritual forces no power is ever lost; but according to the same law there must be as in the natural world, a steady advance towards and a final reaching of a state of abiding rest through the counterbalancing of all the powers of the soul.

Theoretically we must make this supposition, for otherwise there would be within the soul, perpetual motion, self-perpetuated or self-produced activity, spontaneous, or uncaused, unaccounted-for activities.

This difficulty may be met thus: There is an all-important factor in the spiritual world which makes its case different from that of the material. In this latter there is no influence, no impulse, no addition of any kind introduced from without. This is an essential point in the hypothesis regarding the material universe, and this is the reason why there is a steady progress towards final rest. It is otherwise, however, with the soul of man; it is in continual communication with that which

is out of and beyond itself, and is ever deriving impulse and influence therefrom.

Than this there is nothing more evidently true. The man is born into the world fully endowed with all his spiritual faculties, or powers. These, however, are in abeyance and would remain so were they not influenced by that which is without. The faculties of the soul need to be drawn out, stimulated, furnished with material upon which to act; acquisition, education are necessary. All these are furnished through vital union with the bodily organization. There is no need here to attempt fullness of detail; it suffices simply to refer, for example, to the inflow of knowledge through sight and hearing and touch; the stimulus afforded by the various bodily sensations, and yet more the unspeakably great influence of man upon his fellow-man by language spoken and written. There is, moreover, the fellowship and inter-communion of soul with soul, a real power which we exert upon one another, elevating or debasing, as the case may be, and assimilating the character of those who dwell together. What influence we at present receive from other created intelligences, it may be hard to determine scientifically, but there are such beings and Revelation makes it plain that they have such communion with, or power over us that we are largely guided and controlled by them. Still further, while the scientist may exclude all interposition of the Deity from the material universe, this cannot be done in regard to the human soul. God does dwell within man, there is a real fellowship between God and us; directly and instrumentally he teaches, directs, controls us; from him we receive impulse, inspiration. All these things are true of men, while yet within their bodily organization, and will be true, probably with great enlargement, after the resurrection. During the disembodied period mighty influences, however modified, will doubtless still be brought

to bear upon the soul. Because of all this quickening from without, the tendency towards final loss of the activity of the soul is removed; its energies are forevermore continually stimulated anew. In view of the boundless universe and of the countless ages of existence, the enlargement and exaltation of being and activity for the soul are beyond our powers of anticipation and conception.

To appreciate the force of this reply to the difficulty in question, it should be borne in mind, that all that is needed for the perpetual activity of the soul, is to prevent its energies, which can never cease to be, and to energize, from coming to rest by the counterbalancing of one another, according to the hypothesis which is accepted as true in the material world.

This is such a complete removal of the difficulty, that it may be regarded as perfectly satisfactory. Here it may be remarked that the progress of the soul to a state of inactivity, if deprived of influences from without, is far more than a mere hypothesis; it is a dread and well-known reality. A man with a certain amount of knowledge and experience, may continue to be mentally active for a time, if cut off from all that is without, but not perpetually. Shut up in solitary confinement in a dark cell, without a book, or any article which he may handle and use, he passes with rapid strides to lunacy and idiocy. This result is inevitable, unless there be communion with God; with no food for thought he ceases to think; desires, hopes, aspirations die, all motives disappear, volitions are no longer made, there being no occasion, no motive, no thought to call them forth; all has settled down to a dead level and calm, the ceaselessly energizing powers are still there, but they counterbalance and hold one another at rest. The oft-repeated story is a case in point: a solitary prisoner kept himself mentally alive by three or four pins, with which he occupied himself,

throwing them about his dark cell and searching for them, and placing them in every possible posture. So slight an influence from without as this served the purpose.

The second difficulty to be met is the exhaustion at last of the will force through work done by it outside of the soul in the material world.

The well-known fact is that all work is done at the expenditure of force, which must be continually re-supplied. The furnace generates new steam for the engine, the electric storage-battery must be re-charged, the watch must be re-wound, the radiation of heat and light by the sun will result finally in cold and darkness, the material universe is running down and will come to stagnation and death. According to this the will force must exhaust itself by the work which it does in the material world.

To understand this it must be noted, that the attribute, faculty or power of will itself abides forever incapable of exhaustion, or impairment, and is, moreover, ever exerting its full energy, this being the case with all powers, or forces. Of this gravity is a readily perceived example. It ever remains unimpaired and by its never-ceasing energizing attracts all bodies to itself and gives them their unvarying weight. This being true of all powers or forces, they are either at rest through the equilibrium of opposing forces, or they are imparting energy to objects because the forces opposing them are weaker than they. This has been called active force, living power, dynamic energy, or here we might for convenience and conciseness, call it energy, reserving the terms force or power, for that which produces or imparts this energy. The sum total of such energy always remains the same, but any given energy so far as it does work, or which is the same thing, overcomes resisting energies or forces, is expended and exhausted, not however by being destroyed, but by transmutation into the resistances which they overcome, or into other energies.

All work, therefore, is at the expense of "energy," and the work done is exactly equivalent to the amount of energy expended. Moreover not only is the "energy" spent, but also the forces which produce and impart it. The meaning is that a force loses its activity and comes to and remains at rest in producing and imparting energy. The reason of this is that the imparting of energy is limited by the distance or time through which the force operates, the limit is reached when some opposing force brings the force to equilibrium. Gravity, for example, imparts energy to a falling body till it reaches the ground, when the resistance of the ground brings the force of gravity to rest. In combustion, the separated atoms of carbon and oxygen unite and produce a definite amount of heat energy, but no more, because the uniting forces of these atoms are in equilibrium in the produced carbonic acid. A plain illustration of how both the forces imparting energy and the "energy" are expended in work performed is found in the ignition of gun-powder. When ignited, a definite amount of explosive energy is produced, but no more, because the forces producing it have come to the rest of equilibrium in the products of combustion, their production of energy is expended. The produced explosive energy is imparted to the rifle-ball, which if directed vertically ascends a definite distance, that is, till the work of lifting it up in opposition to the force of gravity is equivalent to the explosive energy of the powder imparted to it. For an instant the ball is at rest, the energy has gone from it, it has been transmuted into the work done, the lifting of the ball, or that of overcoming the force of gravity. The ball is at rest when the energy imparted to it is equalized by the force of gravity. The ball immediately descends again, gravity reimparting to it the amount of energy it has lost, but no more; for as it strikes the ground at its original starting place, the force

of gravity is brought to rest by the resisting force of the ground. In all this we see the persistence of force and energy and how both of these become expended in the doing of work and need renewal for further work.

Another beautiful and interesting illustration is found in the pendulum. When it hangs vertically the energizing force of gravity is exerted upon it, but this force imparts no energy to it, because the force which supports the pendulum and gravity are at the rest of equilibrium. They remain thus till some third force overcomes that of gravity and pulls the pendulum to one side, thus lifting it up a certain distance. This third force has expended itself in the work done in lifting and holding up the pendulum, or in overcoming the force of gravity. Upon being released from the third force, the pendulum descends to the lowest point of its swing with the energy imparted to it by gravity operating through that distance. Gravity can pull the pendulum down no lower and can impart no more energy because its force is brought to rest by the opposing force which supports the pendulum. The imparted energy remains in the pendulum and carries it up in its swing in opposition to gravity, till the energy is expended in the work of lifting the pendulum, or overcoming the force of gravity. When the energy and gravity are equalized the pendulum is at rest, but it immediately descends again, gravity reimparting to it the amount of energy it had expended, but ceasing to give further energy, because when the pendulum reaches its lowest point gravity is at the rest of equilibrium. The reimpacted energy carries the pendulum up, and the process goes on. All this is upon the supposition that there is no loss of energy by resistance of the air, nor from friction.

In this illustration we thus have a beautiful and plain exhibition of work done by the expenditure of both force and imparted energy. The power which pulls the pen-

dulum aside and lifts it up, gravity and the momentum of the pendulum, these three are all spent, but not destroyed. The activity of gravity comes and goes with the work done in the swinging of the pendulum, but its inherent power remains ever the same; the imparted energy also comes and goes, but this is by its transmutation into its equivalent of work, or of opposing force that of gravity and its recovery again therefrom.

All this acting and reacting of forces and energies and doing of work is possible because these forces and energies are so related to one another that they admit of transmutation into one another, it may be that they are only different modes of material motion; and because they are in unstable equilibrium, that is, there is not as yet a state of universal rest through the equilibrium of all forces.

As thus presented the points to be noted are: the original ever-energizing forces are imperishable and admit of no impairment, their activity by which they impart energy is limited by the distance or time through which these forces operate, or the relation of things to one another; the imparted energies are transmuted into forces and other energies, and all work is done at the expenditure of these energies and of the activity of the forces which produce them, these forces resupply the expended energies at the expense of their activity.

It is evident, therefore, that when it is said, that the will is exhausted by the work which it does in the material world, the meaning must be that it imparts physical energy which is expended by the work performed and that as this is imparted at the expense of the activity of the will which imparts it, this activity of the will and the physical energy due to it must at length be exhausted.

The activity of the will force in producing physical energy is possible only as it is resisted by forces weaker than itself, and as it is not omnipotent, but weak, it must

soon be brought to abiding rest through general equilibrium with other forces. In other words the will in doing physical work has an actual and a potential, that is a possible, activity, both of which are of necessity limited. This is true of all forces in doing work. Their possible activity depends upon the relations of all objects and forces to one another. The potential activity of gravity in the case of a clock with weights is the degree to which the clock has been wound; when it has run down the activity ceases. The potential activity in a clock moved by a spring is the number of times the spring has been coiled up; when it has unwound itself the activity is at an end. In gunpowder explosion, the possible activity depends upon the amount of powder, the kind, quality and proportions of its ingredients and of the forces involved; when the activity due to these relations has taken place, the activity ceases. The possible activity of a steam engine is that which is due to the amount of fuel which is burning, the steam pressure and the relation of these to all the parts of the engine; when this activity has been expended the engine ceases to move. The possible activity of our earth, its ocean currents, winds, flowing waters, moving objects, its electricity, its burning heat, the growth and activities of plant and animal life, is due to the present relations of all things and forces; when this activity is expended, all would be at rest, were it not for new energy derived from the sun. This is the invariable law, from it there is no exception—all forces in doing work, have a potential, or possible activity dependent upon and limited by the relations of the objects and forces to one another.

If, therefore, the will be a force doing work in the material world, it has only a limited possible activity; an activity dependent upon and limited by the relation of the will and material objects and forces. When this has been expended this activity of the will is exhausted.

With the distinct understanding, as thus presented, of what is meant by the exhaustion of the will through work done by it in the material world, it may be said in regard to the difficulty arising therefrom as follows: In the first place, all that has been mentioned in regard to forces, energies and work depends upon the correlation of forces and their transmutation into one another; this is the central, or essential thought of the law we have presented. Force is never destroyed and lost, it is used and exhausted by being transmuted into other forces. The steam power is changed into the work of the engine, that into the motion of the dynamo, that into light and heat and all kinds of working of electric machinery, and these into others on and on indefinitely in wide diffusion till the rest of equilibrium be reached. The will force, therefore, in performing outside work cannot be destroyed, it must be transmuted into the work accomplished; if the law, of which we are speaking, holds good in regard to it in its relation to that which is material. This, however, appears to be impossible. The material forces are correlated and may be transmuted into one another, but we have no proof that there is any such correlation between these and spiritual forces. From all that we know of the nature of these two sets of energies, it is impossible that the one can be transmuted into the other. Spirit is that which matter is not, as is expressed by the terms immaterial and material. The energies, therefore, inhering in the one cannot become the energies of the other. Hence will-power cannot be transmuted into mechanical force. It cannot in this way exhaust itself through the work which it does in the world.

In the next place the outside work which the man does is indirectly and not directly by will-power. It is by muscular energy that he operates, and it is this which is transmuted into mechanical motion and which becomes exhausted and is in need of recuperation, which it re-

ceives from bodily nourishment. The will no more performs the work than the engineer does the work of the engine. In the one case the work is done by muscular force, in the other by steam power. As thus considered it still further appears that there is no exhaustion of the will energy by the work performed; it is the muscular power which is expended; just as there is no exhaustion of the engineer by the work done by the engine, nor of the little child who presses the electric button and by a mighty earthquake rends the solid rock in the bed of the East River.

In the third place, the act of the will in the case in hand, is one of direction, control, mandate. The will determines, but does not do the work. The engineer directs and controls the work which the engine performs; the little child directs and controls the explosion of the mines in the rock. With a number of buttons at her disposal, she may cause a greater or less explosion, or in one place or another, as well as determine the moment at pleasure. With another person to operate the key-board she may do all this by a gesture, a look, a word. The captain of an ocean steamer by sign, look or word controls the complicated machinery of the vessel, determines her movements and her course, and brings a floating palace with its hundreds of living persons through raging seas, at the speed of ten or twenty miles per hour, safe to port. In all these cases there is no expenditure of force on the part of the director for the performance of work; there is only direction, control, mandate. The same thing is true in regard to the will.

Such being the character of the act of the will, we have in it the revelation of the nature of the relation between the spiritual and the material forces; it is one of mandate and obedience. There is the impassable gulf of separation between the two; the one cannot be transmuted into the other, but such is their relation to one

another, that the spiritual is the superior and has power over the material; the spiritual commands, the material obeys. This is indubitably so in regard to the Supreme Spirit. He holds all forces in his control. He speaks and they obey. He wills and it is done. In creating the finite human spirit he has endowed it with the same kind of power in a very slight degree. At present it is almost, if not altogether confined to power over the nervous force inherent within the network of the nervous organization. But there, it is a reality of which we all are fully conscious, and which we constantly use. We will, and as we will, the nerve force responds and in turn directs the muscular energy which performs the desired work. The reason why our will-power is at present confined to the nerve force, is because it is weak, and suffices only to exert control over the matter and force which have been, as it were, prepared and refined, made delicate and sensitive for this very purpose.

It may not be objected to all this that it is mysterious, inexplicable, inconceivable, for it is not more so than are other mysteries with which we are surrounded. The sun, millions of miles distant, holds the earth in its orbit. Who understands this? Who can form any conception of such a power? We can only say that it is and that it does exert its energy. With no more difficulty we can know and say that the will has power over the material force within the nervous system, so that its mandates are obeyed. This is a fact with which we are familiar, and well attested instances show that such is the real power of the will over material force, that at times it may pass beyond the nerve force in exercising its control. In moments of extreme excitement and exaltation of spirit men have been known to put forth extraordinary strength and accomplish that which at other times is far beyond the possibility of their muscular power. It was done by the control of will over matter. Such being the

relation of the will to that which is without, it is certainly legitimate to conceive, that when it exercises its control and indirectly performs external work, it does not expend its energy beyond the limits of the soul in which it inheres. It acts and commands and it is the part of the material force to obey. There is no exhaustion and no need of re-supply. This may be made more apparent if the word "authority" be used. The will has authority over the material and the material obeys. With prompt obedience to its authority the will expends no energy beyond the limits of the soul; it, as it were, simply speaks and it is done.

In the fourth place if it still be insisted, though it would seem unreasonably, that there must be some outside expenditure and exhaustion of the will force in the work which it does in the world, even if it be indirectly, and even if it be only the exercise of authority, it may be replied, that the soul is constantly receiving influences from without. This has already been mentioned in speaking of the first difficulty. From both the spiritual and material worlds knowledge, promptings, influences, inspiration are evermore being poured into and brought to bear upon the soul. This maintains it in ceaseless activity, develops and expands its powers; the infant becomes the intelligent child, the educated, trained youth, the matured man of intellectual force, of commanding power, and in the life of the world beyond, a being more and more godlike. The will power of such a being will doubtless be vastly greater than that which we now have. It will be what we, at present, would regard as miraculous. Such an one, it may be, will hold material objects and forces at disposal; as he commands they will come and go, and do this and that. Rightly considered our will-power as exerted in the world is, in a small way, miraculous. Man has often denied the possibility of miracles on the part of the Deity; no interposition from

him can be allowed, yet he is all the time doing miracles himself. Man is a new force introduced into the world, a great disturbing factor in the realm of Nature. He has been spoken of as one of the most potent geologic agents. By his voluntary activity and labor he interferes with and changes the course of Nature; great results flow from his activity which would not otherwise have taken place. His every act is a miracle in this sense that it is the play of material forces and the movement of material objects according as he wills. He wills and his body moves from place to place, or remains at rest; he wills and stones fly through the air, or showers of shot and shells; he wills and the strata of the earth yield up their buried treasures of coal and iron and precious metals; he wills and an iron network of rails spreads itself over the continents and ponderous masses of material speed over them by day and night with irresistible force and velocity; he wills and hidden electricity comes from its seclusion and reveals itself with brilliant display, turning night into day; he wills and rivers change their courses, the currents of the ocean are modified and through appointed channels seas, separated by Nature, flow into one another. All this, and vastly more, is due to the thought and will of man, even as he now is; vastly greater doubtless will his will-power be hereafter.

What we have stated is not a supposition; this marvelous development of man's spiritual powers from the weakness of infancy under the stimulus of influences from without is a known fact; nothing can be more assured. Instead of exhausting itself through work done in the world, the energy of the human soul, due to influences from without, exerts greater power. Any loss of energy, were such loss possible, may be and is as a fact even more than regained.

Here, however, the criticism may be made that this

great progress in the energy of the soul under influences from without, may not be any real gain, or increment, but only the drawing forth and development of latent, potential energy, which the soul originally has. If this be the case, no matter how highly exalted the soul's power may become, a climax must be reached and a decline take place, if there be expenditure of force through work done in the world, and final exhaustion must ensue. In reply it may be said, that the known fact is that the soul's energy is enlarged, as life advances, and inasmuch as this is largely due to influences from without, it is fair to assume that if there can be, which we do not admit, any expenditure and loss of will-force upon the external world, its recovery therefrom is possible also. This possibility is, moreover, required by the law of the transmutation of forces; a force which imparts energy, may recover that energy; it is required also by the law of resistance and reaction of forces. When a force imparts energy there is always resistance and reaction. If I hold up a pound weight, I impart that amount of energy to it and the weight imparts that amount to me; but there is no motion because the two energies are equalized. To lift the weight higher I must impart greater energy. Hence, if the will can impart energy it can and must recover energy; the very act of imparting includes recovery.

In the fifth place a still further reply may be given. The nature and the powers of spirit are different from and contrary to those of matter. When one particle of matter gives to another particle it is a loss to itself. When it takes from another particle its gain is at the depreciation of the other. This is not true of the spirit. It both gives and receives without any loss to itself, or to that from which it takes. This is evidently so in regard to its communion with other spiritual beings.

The unspeakable gain which we receive from others, benefits them as much as it does us, they suffer no impairment or loss; and the influences which we exert upon them is with no deprivation to ourselves. So also all the knowledge, impressions, excitements, promptings, stimulus which we receive from the material world leave it altogether unimpaired and unimpoverished; and on the other hand all the spiritual power which we exert over the material is without loss of energy on our part, or gain to it. We take from the material world without depriving it of that which we take, and we exert our energy, influence, direction, control, authority over it without loss to us or gain to it. This is the palpable fact. If we expended energy upon the material it would necessarily gain that much of force; but throughout the many thousands of years of the period of man in the history of the earth, the unnumbered millions of men have been directing and controlling nature in the way which we have recounted above, and yet not the minutest particle of matter, nor an infinitesimal degree of force has ever been added to the material world; this is the positive affirmation of science. The fact that the world has gained nothing is proof that the will energy has lost nothing. It is simply thus—man has willed and his will has been obeyed.

Thus with the removal of these two difficulties the way is clear for accepting the view of the human will as an ever-energizing force which we have presented. In its structure and activities the soul is regarded as corresponding with the structure and activities of the material world. The forces within both are ceaselessly energizing and ever as a unit acting and reacting upon one another; the action of any one force being invariably due to its action upon all the others and theirs upon one another and upon it, independence

448 IX NEW EXPOSITION OF THE WILL

being utterly unknown and impossible, as is also rest except that due to the equilibrium of ever-energizing forces.

The will being one of such forces of the soul, it is evident that its independence of the other powers is unknown and impossible; it acts and reacts only together with them, its every act is that of the unit of these combined forces and its rest only that of the equilibrium which may at times take place in their interaction. A causeless act of the will, one independent of the thoughts, emotions, etc., the whole make-up of the soul is as impossible as is a causeless act of a force, one irrespective of the other forces, in the material world. As the phenomena of the world result from its combined material forces and activities, so the phenomena of the soul result from its combined spiritual forces and activities.

The will may be illustrated by the wound-up spring of a watch. It is an energizing force, held from unwinding itself in a moment by the other forces of the watch; it is at rest when the watch is not going, by equilibrium with the other forces; when active it acts only with and as controlled by these forces throughout the entire mechanism; and the combined result is the movement of the hands over the face, which movements represent the formed volitions. As the spring cannot move the hands at random, irrespective of the forces and activities of the watch, so the will cannot form volitions at random, irrespective of the forces and activities of the soul. And both the watch and the soul need and receive external influence by which their activity is maintained.

The exposition which we have presented will be seen more evidently true when contrasted with that which is given by others.

In answer to the assertion that the power of the will

and the universal law of causation are contradictory, it has been said that they may be contraries, but they need not be contradictories. This seems to be the confusion of knowledge by words. It would be difficult to form any idea of the difference between contraries and contradictories. They are indeed precisely one and the same. A thing which is contrary to another is its contradictory. It is because it is contrary that it contradicts it. That which contradicts another thing shows itself to be its contrary. There are five ways in which the expression may be taken. In the first place it may be regarded as making a false statement, as just pointed out; things cannot be contrary without being contradictory; and, moreover, the power of the will and the universal law of causation are not contraries, the former strictly obeys the latter. In the second place, it may be regarded as meaning that things may seem to be contradictories without being such in reality; fuller knowledge of them on our part would show that they are not. But if this be the meaning it should be plainly stated and not hidden by the words employed. In the third place, the meaning may be that the things are very different from one another, but, though extreme, the difference falls short of contradiction. If so, the expression is as objectionable as in the other cases. In the proportion as things differ they are contradictories. If the difference be trivial, the contradiction is slight; if it be great, the contradiction will be complete. Two colors may be hardly distinguishable from one another, but one differs from the other in having a slight shade or tone of coloring which the other has not; to this extent they are contradictories. Light differs from darkness in having a brightness which darkness has not at all, and hence these are thorough-going contradictions. Extreme difference falling short of contra-

diction between things cannot, therefore, be expressed by saying that they are contraries, but not contradictories; the greater the difference the more contradictory they are, and, however slight the difference they still contradict one another to that degree.

It may not be objected that, if this be so, in having different qualities, objects will have those which are contradictory; for the difference and contradiction are simply between the qualities as qualities and have no reference to the object to which they belong. One quality differs from and contradicts the other qualities, but only so far as it is itself concerned. The one quality is not and cannot be another quality; it excludes from itself all but its own character, but such contradiction does not refer to these qualities as attributes. We may attribute to a body any number of these different qualities which contradict and exclude each one the others from itself, provided we do not attribute and deny the same quality to the object; that is, provided these contradictory qualities which exclude each one the others from itself, do not have such additional contradiction of one another as to prevent them from being attributes of the same body, this additional contradiction being that they are different, that is, contradictory kinds of the same quality. An object may have different qualities, but not different kinds of the same quality. The common expression different but not contradictory may be used for convenience, if properly understood as meaning contradictory in one respect but not in another; thus qualities may be contradictory as regards one another, but not as attributes of an object, or not as being different kinds of the same quality.

Thus a marble may be round, white, hard, cold. These are different because they contradict one another, each excludes the others from itself, but they do not contradict one another as attributes of the marble. But this

marble cannot also be square, red, soft and hot, because these qualities not only contradict the others as qualities, but also as attributes of the marble, because they are different, that is contradictory, kinds of the same qualities, namely, shape, color, density and temperature; a body cannot have more than one kind of each of these at the same time.

All the above is of value, as it proves that freedom and causation cannot be affirmed of the will, for they are different kinds of the same thing, namely "mode of acting," they exclude one another as attributes; if the very nature of voluntary action be one of these, it cannot be the other. This necessitates the rejection of a fourth way in which the expression may be taken, as meaning contrary to one another, but not as attributes of the will; they are contradictory in both respects.

In the fifth place, and this seems to be its real character, the statement may be regarded as an attempt to express an indefinite, unattained, unknown thought; something which the mind is grasping after, but fails to reach.

It would seem that these are the only ways in which the statement may be taken, and if taken in any of these it must be rejected, and in its objectionable character it stands in bold contrast with the plain, simple and true statement that the power of the will is a real force, which like all other forces obeys the law of causation.

Again it is said that the power of the will, and the universal reign of causation are ultimate facts, and must be accepted as true, even though we cannot trace the connection between them. The principle here involved is perfectly correct, but it is not the case that it must be here applied. It is right for those to resort to it, who do not perceive the connection between the power of the will and the law of causation. However inexplicable it may be to them, they are assured of their own free agency and causation. They cannot deny what are to

them ultimate facts. But there is no need to resort to this principle in the present instance; for it is possible to explain, as has been done, how the will acts in accord with the law of causation. Thus, the will is a ceaselessly energizing force within the soul, held, controlled and directed by the other powers, ready for any action and utilized by the man according to his own thoughts, emotions, etc., and environment; just as steam is an ever-energizing force held within the boiler, capable of and ready for any work, and controlled and directed by the engineer and utilized by him according to his thoughts, etc. The law of causation operates exactly in the same way in both cases. Here we must carefully discriminate. The will is free in so far as it is an energizing power capable of and ready for any volition; beyond this it is under the law of causation; and the man is a free agent because he has this voluntary power, and uses it according to his own thoughts etc., and because in his thoughts, emotions, etc., in all that constitutes his character, himself, he is what he is because of original endowment, education, training, environment, and the way in which he has himself made use of all these throughout successive years. There is such a thing as the building and establishment of character, and that which has taken years of labor, effort and experience to form, cannot be ignored, nor destroyed, nor radically changed in a moment.

Here everything is plain and self-evidently true. Here there is a sufficient and efficient cause for everything; a cause for what the man is, at any given moment, in himself, his character, his thoughts, emotions, etc.; these are the cause of the direction and control given under which the volitions come and go, and have their peculiar character; and the cause of the uprising and passing away of the volitions beneath this control and direction is the will, a ceaselessly energizing

force within and at the disposal of the soul, as the ever-pressing steam power is at the disposal of the engineer; and in the midst of all this causation, operating exactly in the same way in which it does in the material world, the man is free in such a sense and degree that he is responsible; because he has this ever-energizing will-power within him and at his disposal, because he utilizes it himself and not another, according to what he is, and because he is what he is by reason of the use which he has made of his original endowments and ever varying environment, spiritual and material, and has, moreover, the perception of right and wrong. All this, which is so evidently true, is in direct opposition to statements which have been repeatedly made, thus, "To act freely is the very nature of the will." "The human will, because the activity of a person or spirit cannot but be free." "Its freedom is its essence." "In the material and spiritual realms causation operates differently because of the radical difference between them. In the one case it is physical and, therefore, must be necessary; in the other it is rational and, therefore, must be free."

In all this there is failure to make proper discrimination between the will as a power of the soul and the soul, or person, of which it is a faculty. It is the soul that is free, but the will itself is not free; it is held, controlled and directed by the soul, or person who utilizes it, and it acts according to the law of causation. It cannot break away from, nor be independent of, nor indifferent to the control and direction of the other powers of the soul, neither can they break away from it. These ever-energizing forces are ever acting and reacting upon one another, and what a man at any given moment thinks and feels and says and does is the resultant of the action and reaction of these forces; a resultant which is as necessary as is the resultant

of the acting and reacting of the forces of the material world; a change may take place at any instant in the man's conduct, but only as there is a change in the acting and reacting of the forces of the soul. There can no more be an independent force in the soul, than there can be an independent force in the material world. Were this possible there would be a kingdom within a kingdom, with the destruction of harmony and order, and the introduction of antagonism and discord; the soul, with its varied and complicated attributes and activities, would not be a closely compacted unit, the man would not have complete and assured mastery over himself. All assured accomplishment of purpose and safety against wreck and ruin for the engineer depend upon the certain response of the steam power to his control, and for the man upon the certain response of the will-power to the control, which he has over it, through all the powers of the soul.

For the will to break away from such control would be like the breaking away of the main-spring of a watch, or of the heavy weight of a clock, an unintended, useless, senseless, disastrous crash. Taking all this into consideration and making the proper discrimination between the will, as a power of the soul and the soul to which it belongs, it is evident that it is a misstatement to say: "To act freely is the very nature of the will." "Freedom is its essence." "The human will cannot but be free." It is free only in this sense that it is a force which acts of itself in virtue of its own energy and can form any kind of volition, in the same sense in which steam is free, as it is a force which acts of itself in virtue of its own energy and can do any kind of work within the sphere of its activity, but otherwise neither the will force, nor the steam is free, because inseparably connected with other powers and under their positive control and direction. They both

act under the law of causation and with the same necessity. Hence also, it is a misstatement to say, "That in the two cases the operation of causation is different because of the radical difference between them. In the one case it is physical and, therefore, must be necessary; in the other rational and therefore must be free."

We have here not only a misstatement, but also an unfortunate use of language. Strictly speaking causation cannot operate freely, it must operate necessarily. Causation is not that which may or may not produce its effect; it is that which does and must produce its effect. If its effect does not follow it is not causation. Causation, therefore, is not brought to bear upon the will, if it does not necessarily determine its action, and the will is free to act, or not. In such case the will is its own master; it decides for and determines itself. When it is said that in the case of the will causation operates freely, the only possible meaning is that the will is free to act, or not in response, but this is to be free from causation, free from that which necessarily produces its effect. If the will being free does not act or acts in a different way, it has not been caused, and if it does yield to that which has been brought before it, it has not been caused to do so by it, but being free it has of itself yielded instead of refusing, as it might have done. It acts in that way because it does; that is, of itself it wills in that particular way. There is no causation, no force outside of the will producing its effect; that which is before it is only an opportunity, suggestion, proposition, a mode of acting, a guide, rule or dictation presented to the free will upon which it acts or not as it may; these have no power to cause the will to act in their way, if the will be free to act or not in response. For free will they are not causes, they do not act freely, they do not act at all upon such will. They are that which a free will uses. I put

my hand in the fire and burn myself. The fire does not burn me, it cannot even take me unawares and burn me, if it can act upon me only as I will, as I permit. I place my hand on an embossed surface and make an impress upon myself; the surface is inert; the impress and its character are mine own. I make it by using that surface, as a printer makes a print from a plate which he takes from a large collection; the print and its character are his own doing, he made it by using the plate which he took. So a free will is not caused by external things, it uses them as it wills.

It cannot be claimed that there is causation acting freely because the will is self-caused; such are the forces, activities, nature, laws and character of the will, that it is caused by them to act in the way in which it does in regard to external things, for this would be necessity, the will would not be acting freely. A magnet acting as caused from within by its own forces, nature, law, character, is under necessity; it must draw to itself the piece of iron presented to it. A man, if caused by his own depraved character, habits and tastes to do evil, is acting under necessity. If a man is caused by his good character to act uprightly, he also is acting under necessity. So far as there is causation there must be necessity. As the leopard cannot change his spots, so they cannot do good that are accustomed to do evil. If the will be caused from within it acts by necessity.

When under temptation to evil men do that which is wrong, it is generally said that they act freely. This, however, is not the case. They act voluntarily but not freely; they have been overpowered, overcome, overmastered, they have lost self-mastery. The temptation has compelled, constrained, caused them to do wrong. They are, however, responsible because it was themselves that did the wrong, knowing it to be wrong; they willed to do it, it was their own act, acting under compulsion;

and because it was their own fault, they ought to have had strength of character, of principle and of self-mastery to resist. Inexcusably vanquished by inferior force, as is often the case in warfare, or not having the strength which they ought to have had, they were at once both helpless and responsible. This illustration serves to show that causation does not and cannot operate freely, but necessarily. Another illustration showing the same thing is obedience to authority. Such obedience is voluntary, but not free; for authority is no authority unless it enforces and secures obedience. The obedience of children to parental authority is voluntary but not free. It is often said, those children are under perfect control, they are uniformly and promptly obedient—these children are beyond control, they are always disobedient. The reason is because in the one case the parental authority is real and has controlling power, in the other it is only nominal: in the one case by education, training, discipline, authority has been enforced and established; the children are not their own masters, they cannot do as they please, but must live and act according to parental rule and command. In the other case there has been no exercise of parental authority, the children have been permitted to run wild. Parental authority is still further enforced by the civil power. The runaway child may be arrested and returned home; the incorrigible may be imprisoned in the house of refuge, or some other reformatory. By law the child is not free till of full age. Just in proportion as authority is real, is obedience enforced. Under army and navy discipline obedience to the commanding officer is voluntary, but at the same time compulsory. In our own land we are a free people not because we are free to obey the civil government, but only because we make our own laws and select our own rulers. When the law is enacted and the rulers are in office, our obedience is necessary, as necessary as is the

work done by a slave beneath the lash of the master who owns him. In the family, the army, navy and state, authority is the rightful exercise of power compelling obedience, power which produces its effect; it is a cause operating necessarily. If the effect does not follow, there is no cause, no compelling power, no obedience, no authority. The Roman centurion well expressed the truth who said to Christ, "For I also am a man set under authority, having under me soldiers; and I say unto one, go and he goeth; and to another, come and he cometh, and to my servant, do this and he doeth it. Speak the word only and my servant shall be healed."

Thus it is evidently impossible for causation to operate freely; so far as there is causation, the effect must follow. To say that in the spiritual realm it is rational and therefore must be free involves error of thought and the wrong use of language. To these the whole difficulty is due. The attempt is made to unite causation and free action. This is impossible; the former is necessary, the latter is without necessity. Moreover, the will is not free, it acts under the law of causation. Two children are punished, the wrong-doer and the one who caused him to do wrong. The act of the first was not itself both caused and free. There was causation all through. The voluntary act of the wrong-doer was caused by his thoughts, feelings, wishes etc., these were caused by the skillful work of the second child. When he had fashioned them aright for the purpose, they framed the volition and the wrong was done. This explains how the voluntary acts of a man may be caused without destroying his free agency. It is by operating upon and shaping his thoughts, feelings, wishes, hopes, fears, etc., leaving them free to cause his volitions as they will and must do; the man is free from violence to his nature.

There is need of careful discrimination, knowledge and definition.—"Will" is simply power to act, or execute,

it can no more be said to be self-caused, than can the material forces. These and the will are energizing powers to be utilized. The will is "power to act" used by the thinking, feeling, wishing soul to impress, execute itself upon the activities of its various acting and reacting faculties, thus bringing them under its direction and control, and to execute its thoughts, feelings, wishes, decisions, etc. The will has no choice and decision of its own. Choice is emotional, it is the feeling of preference, of "pleasure in," and "wish for." Decision is the conclusion reached by thinking, comparing, considering, it is made by the cognitive powers. The two act and react upon one another, the soul by will-power executes them, or not, according to the strength and character of the feeling and thought; these as executed are in a secondary sense the will of the soul.

This executive power of the soul is the same that nature has over its activities. But this power of nature is not called will, because it is the control of material forces producing material phenomena; while that of the soul is the control of spiritual forces, producing spiritual phenomena; such as thoughts, reasoning, purposes, plans, desires, language, speech, bodily movements expressive of intelligence and emotion and directed to intelligent acts; the name of will is reserved for, and given to this control. Though different in rank and name the executive power itself is the same in both cases. Thus heat executes itself or acts upon an object and makes it hot like itself; it acts upon the force of cohesion and drives apart the particles which it would hold together and causes expansion. Steam executes itself or acts upon an object and imparts its own motion to it. Gravity which is the power of drawing, executes itself upon an object and draws it to itself; the crystalizing power of water executes itself upon the molecules of water and makes them crystallize in its shape. The

same power of alum executes itself on the alum molecules and makes them crystallize in its form. The same power of the diamond executes itself on it and makes it take the form of its crystal. The organic forces of plants execute themselves on the material at hand, and form in each plant its own foliage, flowers and fruit. The sun executes itself on far-distant worlds, making them bright like itself with the light of day and the brightness of the morning and evening stars. Thus on throughout the entire realm of nature without end. In all these there is executive power, power to act, to control.

It is precisely the same with spiritual forces—thus, thoughts execute themselves, or act upon emotions, making them like themselves. Wishes execute themselves upon the thoughts, so that we carry on our thoughts as we wish. Imagination executes itself upon the hopes and fears, making them of like character. Thinking and reasoning execute themselves upon our beliefs or trusts, making them what we think and reason. Perceptions of external objects execute themselves upon the whole process of our thoughts and reasoning, making them of corresponding character. Perceptions of sounds, such as of speech and music execute themselves upon all our thoughts and emotions. Thoughts, emotions, wishes, decisions reached by reasoning, execute themselves upon the nerves and make our bodily movements expressive of them. The whole soul, as it is as a unit at any given moment executes itself upon its various faculties and makes their activities like itself. A soul of great intellect, noble and good executes itself upon its activities making them of corresponding character; a soul weak, foolish, depraved executes itself upon its activities, making them like itself. In all these there is the simple power to act, to execute, to control, in no wise different from the executive power of nature, though

called will to distinguish the spiritual from the physical; the latter is the executive power of nature, the will is the executive power of the soul.

Being simply "power to act," the will evidently has no choice or decision of its own; by it the soul, as it is at the instant, executes itself, as an engraved stamp executes itself on that upon which it is pressed.

The expression "self-execution" is preferable to "self-determination." The latter needs careful definition and explanation to guard it from error. Without these it implies that man has a power which he does not possess—that by his will he acts independently of his environment and character, and by mere volition can immediately fashion in any way both himself and his conduct.

"Self-execution" expresses all and more than all the truth expressed by "self-determination" and without the ambiguity and error of the latter term. The precise truth is, that the whole soul, including all the impressions made upon it from without, impresses itself upon itself and its environment. Here we have the will in its true nature, as mere executive power, and the soul exerting its influence upon persons and things according to its own character, and fashioning itself according to its own nature and character and the new elements and influences received from without, such as knowledge, impulse, suggestion, fears, inspirations, etc. All this is exactly and pointedly expressed by "self-execution," but not by "self-determination."

Causation is that which necessarily produces its effect. Though language, because of its brevity and imperfection, often seems to imply it, an effect cannot have two causes. Every force is a cause; there may be two or more forces, that is, causes, forming a cause; each of the component forces, or causes, produces its full effect, but the resultant is as they act upon one another; there may be a series of causes, each effect being the cause of

the next throughout the series; there may be a number of causes operating on the same, or on different things and at different times; and each of several causes may have the same effect. All these distinctions are expressed by the same language, which quickly and without notice passes from one to another.

Influence is a cause producing its effect; the slightest influence is causation. The term properly denotes one of two or more forces acting together, the resultant of which is the effect. Each force produces its own effect, but cannot of itself produce that of its action with the others. The use of the word is the source of error, as it seems to intimate that there may be influence without causation. This is impossible; forces which produce no effect upon us have no influence.

“Free” is “free from,” free from compulsion, from necessity, and hence free from causation. Men and things are free only so far as they are free from causation. As to freedom the question is from what causes and to what degree are men and things free? There is no perfect freedom. Men and things are free only because free to a greater or less degree from some causes, though not free from all.

An agent is that which acts by inherent force or forces which produce their effects, as gravity, heat, etc., and the forces of thought, emotion, etc. Things and men are agents, and as such are free, so far as free from external causation, which is never altogether the case.

Definition of “Free-agency”: A free-agent is that which acts by its own inherent forces, according to its nature and laws, free from all violation of its nature, and in varying degree, though never entirely, free from external causation. This is precisely and definitely that of which men are conscious. They know that they act by their own inherent powers; that their actions are

rational and emotional (caused from within) and in large measure, according to their environment (caused from without), the only freedom of which they are conscious, being freedom from violation of their nature and in some measure from external causation.

The consciousness of acting by their own inherent powers is often misinterpreted by men as implying a freedom which they by no means possess. A wound up watch acts by its own power, but not independently of its structure and condition as a watch and of external influences; so men act by their own power, but not independently of the constitution of their nature and character, and they and their environment must necessarily ever act and react upon one another.

Hence also, there are various degrees of freedom and responsibility. The freedom of individuals varies according to circumstances and some men are more free than others. Those of a masterful spirit rule their fellows and subdue in good degree the external forces brought to bear upon them, while men of a weak and yielding disposition are ruled by others and swayed by their environment. At times external circumstances are of such a character that they overpower and master the individual and again are such that they exert only a slight influence. By education and self-discipline men may become more masterful and hence more free from the control of other persons and of circumstances.

With this varying freedom responsibility varies, God alone, the omniscient judge of all, being able to determine its degree, making all due allowances. Those of superior endowment and education and those who have had all things in their favor will be held to a more strict account than the weak and ignorant and those who have had all things against them.

Freedom, causation, necessity prevail alike in the mineral, mechanic, organic, animal and human realms.

A stone, or any material object, is a free agent, it acts by its own power and according to what it is in itself, its nature, character and laws. It is free so far as it is free from external causation. It does not act only as acted upon, but it acts by its own power and in its own way, except as it is overpowered by external forces, and only so far as they are strong enough to overcome its resistance. Of itself the earth, rotating on its axis, would move on forever in a straight line with undiminished force and velocity. It moves in its orbit around the sun because the force of the sun deflects it to that degree, but cannot overcome its resistance further and draw it down to its own surface, nor interfere with its rotation, momentum and velocity. Should the sun relax its energy, the earth would of itself go on in its own way in a straight line. It is a free agent. A stone thrown by you into the air, moves because you have exerted your strength upon it and have overcome its resistance; a large stone you could not overcome and throw. The stone in motion would move by its own energy in a straight line forever, but it is overcome by the force of gravity, which draws it to the ground against its resistance, but only in a curved line and gradually, not having force enough to do otherwise; finally the stone strikes the ground and is completely overpowered. Thus it is with man. He is as free as a stone, but not more truly so. He like it acts of himself, by his own power according to his own nature, character and laws, in his own way except as he is overpowered by forces ever acting upon him, and only so far as they are strong enough to overcome his resistance. Man, the earth and the stone are alike free agents.

A watch is free—it moves of itself for hours, in good degree free from external causes, and according to what it is within itself; if good and in proper condition it

will keep time, if poor and in poor condition will itself gain or lose time. It moves and governs itself, till exhausted; man can do no more.

All plants in like manner are free agents. They determine themselves by themselves. By their vital forces and activities, according to their own nature, character and laws and in their own way they perform all their own mysterious organic functions, select from air, earth, water and sunshine appropriate materials and construct their own roots, stems, foliage, buds, blossoms, fruit and seed, reproducing themselves after their kind. They are free except so far as overcome by influences from without and caused to grow otherwise than they would, stunted, ill-formed, sickly and without flowers and fruit. Man and plants are alike free. All animals are free also. The same definition of free agency applies equally to the earth, stone, watch, plant, animal and man.

In the five realms freedom is the same, the only difference being one of rank, of greater or less superiority according to the character of the things and forces. A stone has no spiritual powers, and cannot act with powers which it does not possess, but it does act freely with those which it has, resisting all opposing powers. It is its nature to determine itself by itself; it is free, so far as free from external causation due to forces acting upon it. Its freedom is inferior in rank to that of man, only because man's freedom is that of superior powers; those of consciousness, intelligence, emotion, desire, volition.

So also, causation and necessity prevail alike in the five kingdoms. The activities of material objects are caused from within; they are caused also to a greater or less degree by forces from without, according as such are strong enough to overcome their resistance and are brought to bear upon them. The causation, whether from within

or without, is necessary. The plant's activities are caused by its own vital powers, etc., from within, and also by external forces so far as these are brought to bear upon them with sufficient power to interfere with and determine their actions. Here also is necessity. The same is true of animals. So likewise with man; all his activities are caused by his own powers, etc., from within and also by external things so far as they are or have been brought to bear upon him and have power to determine his thoughts, emotions, desires, hopes, fears, etc., and through them as secondary causes, his volitions. Here are causation and necessity both from within and from without, as truly as is the case with the animal, plant, mechanism and mineral.

To such a degree is man caused from without, that it is difficult to decide whether the causes from within or those from without have the greater effect. A citizen of our own land, a Filipino, a Russian peasant, the Tsar on the throne of his fathers, have been made in character, thoughts, emotions, hopes, fears, aspirations, beliefs, efforts, habits, conduct, speech, what they are, by birth and life-long environment. Addison says, "What sculpture is to marble, education is to the soul." Unprogressive conditions of human society reproduce the men of the past with unfailing regularity. In localities where occupations are handed down from father to son the individuals are the exact reproduction of those of former generations. Savage and barbarous people when discovered are perfect representatives of their forefathers from remotest times. An Arabian Sheik of to-day is an Abraham still living. The Chinese in their own land differ in no respect from men of centuries ago. Until recently the Japanese were no other than their ancestors, and would have remained such were it not that by Western civilization they are being made like ourselves. The native tribes of Africa have been unchanged for ages, but

are now rapidly advancing by reason of the opening of the Dark Continent. Even the weather determines how we think, feel, act and speak; by utmost effort we cannot entirely throw off its mastery over us.

The truth plainly and briefly stated is, all activities of all material things, plants, animals and men are caused and as caused are necessary, but some of these activities are free also; not that they can be both caused and uncaused, but that they may be free from some causes, though never free from all; that is to a greater or less degree free from some external causes, either as some external forces do not bear upon them, or they by resistance destroy in some measure the efficiency of such forces. Like that of the stone, watch, plant and animal, man's activity is caused by that which is within, and always in some large measure by that which is external, but they all and he are free agents because they act by their own powers according to their nature, character, etc., and are in large measure, though never altogether, free from external causes. Though he is free in common with all things else, man's freedom is the far greater and superior because it is not the freedom of the animal, plant, mechanism or mineral, but the freedom of a god-like being; a freedom so superior that ordinarily all other freedom is obscured and disregarded, as though man alone were a free-agent. The idea of causation is perfectly definite; it is a cause necessarily producing its effect and we can conceive of no difference in it whether it acts in the material or spiritual world.

By holding up, as we have done, our exposition of the human will in contrast with that given by others, its truth has come the more prominently forward. It may well be regarded established that the will acts strictly according to the law of causation, which acts always and everywhere in the same way. But further confirmation is at hand.

A striking illustration of the causation of the will is afforded by vacillation. Under it all the varying actions are volitions—they rapidly come and go as they do, because the man is in a tumult of conflicting feeling, hopes, fears, thoughts, reasons, and conclusions. These sway the will as the fitful winds sway the weather vane; both the will and the vane are formed to move in any direction, but they move as determined by the influence to which they are subjected. They are for this very purpose; the vane to show the direction of the wind, without which it would be useless; and the will to execute, to give expression and effect to the thoughts, principles, purposes, emotions, wishes of the man, without which it would be of no value; it would be annoyance beyond endurance if the will did not respond exactly and necessarily to the wishes and mandates of the soul, like a mule with his power of contrary choice.

Again, it is only as the will acts under causation, that our conduct is rational and ourselves responsible. This is self-evidently the case. If our volitions are formed uncaused by our thoughts, they are irrational; and if formed uncaused by our thoughts, principles, views, feelings, etc., they have no moral character. Such volitions do, in certain abnormal or deranged conditions, occur, and by common consent, the man is considered not responsible for them. Volitions are often formed in moments of thoughtlessness, inadvertence, abstraction, absent-mindedness, intense excitement, sleep, dreams, somnambulism, drunkenness, hypnotism, lunacy, idiocy. The volitions in all these cases have two characteristics in common; they are not properly determined by the man's thoughts etc., and for them the man is not responsible. There is in these cases some interference with, some deficiency, or derangement of the proper and normal control and determination of the will by the other powers of the soul, and it is because the will acts

without proper causation, that the volitions formed are irresponsible; they are irrational and without moral character. It must also, however, be borne in mind, that the man himself may be held responsible for being in such conditions; as for example, he has no right to be drunk, and drunkenness affords no due excuse for wrong doing. The man should ever hold himself in perfect control and never seek in the loss of self-mastery an excuse for evil deeds; and there can be self-mastery, rational, moral, responsible, only in so far as the will is controlled by the other powers of the soul, not freely, but necessarily. Only thus can self-mastery be assured. It must rule with no uncertain power.

Again, the causation of the will is the teaching of Scripture. It speaks of the dominion under which the will is. The sinner is the servant of his own vile nature and habits. Christ makes men free by change of masters. He sets men free from the dominion of sin by making them the servants of righteousness. This is to be free indeed, not because men freely submit to the new dominion, which would be no freedom, or no dominion; not that they are free to do right, or wrong, but because they are free from the power over them of sin and evil, and because men have and act out their true nature, as originally designed and made, when under the dominion of righteousness. According to Scripture, all wrong and wrong doing are foreign, abnormal, unnatural to man; they are a disease, deformity, malformation, monstrosity, harmful, destructive, and to be free from these is to be free indeed.

The peculiarity of the exposition of the will, which we have given is, that it is the application of the scientific view of the material universe, and is formed from the law of the conservation, or persistence and correlation and transmutation of forces. The individual human soul is conceived of, as an ever-energizing cosmos; its activities

being due to the harmonious acting and reacting upon one another of its varied powers. These are all ceaselessly energizing, are inseparably bound together and invariably act as a unit; every volition is the act of the entire soul, the resultant of its combined forces and activities; without any break, hiatus, gulf, or separation, there is an even flow in the soul's activity; every step, or stage springs from the immediately preceding one and determines the next, precisely as is the case with the material cosmos; it is self which determines self; the whole make-up of the soul, its character, thoughts, emotions, views, principles, hopes, fears, habits, volitions, acts, the entire self of one moment determines self of the next moment; the only exception, interruption, or uprising of the altogether new and isolated possible, being such as may, and do arise from influences brought to bear upon the soul from its outward environment, the soul in itself and activities being the resultant of the internal and external forces. And as the material universe can never cease to be, unless destroyed *ab extra*, so the soul, the spiritual cosmos, can never of itself lose its being. It must forever continue to be with the full energizing of all its faculties; but unlike the material world, which ever tends to equilibrium of its ever-energizing forces and to stagnation, it evermore remains in full activity because of the influences ever brought to bear upon it from the material and spiritual realms within which it lives, and especially from the Great Being for fellowship with whom it was made, whose likeness it bears and with whom it holds communion forever.

Herein is its superior exaltation, its god-like character, that it has been endowed with will-power; and herein its great responsibility, that over that will-power it, the indivisible soul, the unit of combined, ever-interacting powers, has been entrusted with complete control.

Intuitive Perception

CHAPTER X

Conclusion

TRUTH UNASSAILABLE

THE Conclusion reached—

The Philosophy of Pure, Thoroughgoing Realism is an Impregnable Stronghold. It gives us assured Truth, that which the human Soul desires above all things.

We have this in the Infallible Testimony of Consciousness, as universally interpreted by men.

By Intuitive Perception we immediately cognize the Realities of the spiritual and the material world.

We know that they are, and that they are what we cognize them to be.

By the same Infallible Testimony we trace all things of the Material World up to the First Cause, which to be such must necessarily be The Infinite Absolute, and must have within it, the intelligence, design, plan, purpose, adaption of means to ends, law, order, harmony, beauty, *goodness* everywhere prevailing in Nature and in its relation to the spiritual, and having these must have together with them *Volition* also, without which these cannot possibly be.

We, likewise, trace ourselves as Living Persons to the First Cause, which as the Author of our being must have within Himself a Living Personality; whatever else He may be cannot possibly be destructive of this.

It is an act of *unreason* to ignore God.

It is the highest act of human Intelligence for it to

confine itself within the Finite, its own sphere, and in seeking the origin of all being to rest content upon reaching The Infinite Absolute, essentially the Invisible, the Unthinkable, yet known in our knowledge of His works in Nature and of ourselves as His Offspring, and by the face to face Vision of the Supernatural One, who walked among and was seen and heard and handled of men; God made known in fashion as a man.

With this Infallible Testimony we, amid the uncertainties and dangers of the present Age of Doubt, hold firmly in our possession Truth Unassailable, The Truth of Natural Realism and of a Personal God.

“FOR THH INVISIBLE THINGS OF HIM FROM THE CREATION OF THE WORLD ARE CLEARLY SEEN, BEING UNDERSTOOD BY THE THINGS WHICH ARE MADE, EVEN HIS ETERNAL POWER AND GODHEAD.”

INDEX.

- Abnormal Conditions, 284-8
 Absolute—see Infinite,
 Act of Perceiving, 219
 Acquired Perceptions, Not, 251
 Adam and Christ, 71
 Aerial Images, 274
 Agnosticism—compare Ch. 7, Sec.
 5, 36
 All changes are Effects, 396
 Anatomy, 163
 Animal Life, 59
 Animal Morality, 421
 Animal Self-Consciousness, 204-5
 Annihilation, 103
 Anthropomorphic, 351
 Apparent Deceptions of Vision, 271
 Archimedes, 208
 Attention, 299
 Automobile Power, 209

 Barbarous Races, 64
 Being, 308
 Being, an Attribute, 309, 335
 “Being of Being,” “True Be-
 ing,” 324-5
 Being—Infinite Absolute, un-
 known, 336; how known—un-
 thinkable, 337-41
 Belief, 9
 Belief, the Faculty of, 302
 Bent-Stick in Water, 272
 Berkeley, Theory of Vision, 250
 Bible—True, 73
 Binocular Vision, 263
 Blackness, 237-239, 243, 244
 Board between the Eyes, 266
 Bodily Feelings, 148
 the Reflex of the Body, 149
 the object of, 150
 spiritual, 151
 material, 156
 Button, Steel, 241

 Camera and Retina, 221-274
 Carpenter, Dr. W. B.—Double
 Vision, 268
 Cathedral, 261

 Cause and Effect an alleged excep-
 tion, 397; the First, 399
 Cause for Every Thing, 453
 Causeless Act of Will, impossible,
 447-8
 Cause and Effect—Mystic Views
 Rejected, 388
 Central Point of Retina, change of,
 265, 269-71
 Cerebrum, 178
 Child disappears at top of pole, ex-
 plained, 282
 Choice, 406, 459
 Christ, 42, 43, 340, 341
 Christ, we know, 343
 Civilization, primeval source, 64-5
 Color—cognized as a material qual-
 ity, 155
 Color, 152, 154, 158-9, 160, 169,
 197, 229, 236, 238, 239-240, 241,
 242-246
 Color Blindness, 277
 Colors—complementary, 277
 Colorlessness, 244
 Common Sense and Philosophy,
 contrast between, 293
 Common Sense and Philosophy
 blended as One, 293
 Complete Content of Self, un-
 known, 298
 Concept of Color as a Quality, 238
 Conclusion—Truth Unassailable,
 471-472
 Concrete Being, Time an Attri-
 bute of, 310; see also 112-120
 Conscience, 105, 397, 401-2-7-9-25
 Conscience, 402-408, 417-418; not a
 special attribute, 409
 Consciousness, 1
 Trustworthy, 1
 One Power, 3
 Why Infallible, 4-7
 Concentration of, 299
 Conscious throughout the body,
 139-141
 Contradictory, the, to us not to be
 rejected, 345-346; also vi
 Cosmos, 290

- Cosmos a Reality, 332
 the material, 145, 292
 Cosmos, the Spiritual, 145, 427, 470
 Cosmos, true concept of, 293
- Delicacy of Presentation by Organs of Perception, 211
 Depravity, Cause of, 51, 398
 Determination, Self—Self-Execution preferable, 427, 461
 Discursive Reasoning, 295
 Distances, Visual, 250-6-9
 in young animals, 258
 by Infants, 258-9
 Distant Objects enter the Eye, 227-229
 "Distinct as the billows," 317
 Distinction between the Spiritual and Material Essential, 379
 Distorted Images, 279
 Divine Immanence, 65, 350
 Dominant Ideas, 283, 288
 Dormant Life, Plant, Animal, 356, 360
 Double Personality, 94
 Double Vision, shown, 267-278
 the difficulty explained, 268
- Ear for sound only, 177
 Ear, 287
 Echo, 287
 Effect essential to power, 368
 Effect, manifested Efficiency, 375
 Effect, manifested efficiency, 394
 Efficient Reality, 368, 389
 Efficiency—a seen reality, 375;
 ever-energizing, 390; Intuition of in children, 391; Consciousness of, 369
 Efficiencies of the world, 372
 Elements, 317
 Energy expended in work, 437-441
 Essential Distinction between the Spiritual and Material, 379
 Eternity radically different from Time, 378
 Evolution, 29-55-57
 so-called, 68
 Eye, 220 *seq.*
 its luminosity, 172
 Executive Power, 406-7, 459
 Executive Power, Will, 427
 self-execution versus self-termination, 427, 461
 over the body, 370
 External Perception, 160, 184
 nature of, 190; testimony of Consciousness, 195-207
- External Perception—Scientific view in accord with Popular, 195-206
- Fakir, Hindu, 282, 284
 Finger, the Little, seen double, 264
 Finger-pressure on Eye, 266
 First Cause, 399; The Infinite Absolute, 400
 Flash of Lightning a Substance, 315
 Flavors, 289
 Foramen Centrale of Retina, 265
 Forces, thought of, 373
 Free agency, 462-3-9
 Freedom, 397, 428, 465, 469
 Freedom—a stone, etc., 464-5-7
 Free Will, 455; not moral, 406
- Geometry, 384
 Germ—Organic—Vitality in, 358
 Glowing Spark, motion of, 266
 God, definition of, 39-40; Christ, 341; the Invisible seen in Christ, 346; comes forth from His Infinity and enters our finite realm, 344; our highest thoughts of, 345; Intuition of, 347; known in His works, 348; compare, 38; soul-thirst for, 349; immanence, 350; universal thought of, 26
 God, in Nature and Men, 415;
 Moral Argument for, 417
 Gustatory Nerves, 177
- Hamilton, 14, 160, 250, 291, 303, 312, 321
 Hermance in India, 282
 Heredity and the creation of the soul, 50
 Hindu Fakir, 282, 284
 Holy Spirit, impressions due to, 348
 Hypnotism, 95, 97, 101, 468
- Idealism, 159-160, 203; contrasted with Realism, 333
 Identity, Personal, 76
 Immanence of God, 65, 350
 Immediate Cognition of Realities, 301
 Immortality, 102
 Impregnable Truth, 380
 Inanimate Things have life, 354
 Incarnation, the, 340
 Inert—nothing, 395
 Infants, visual distance by, 258
 Infallibility, 200, 219

- Infinite Absolute, the, 334; we know that it is, 334; not what it is, 335; origin of the thought of, 334, 337; known in its effects, 338; compare, 36-40
- Infinitude, 129, 130
- Instinct, 147
- Intaglio, 281
- Internal Perception, 294
- Intuition, 7, 294-6; in children, 391
- Intuitions, 306 *seq.*
- Intuition of God, 347; finite, but real and true, 347
- Intuitions source of all knowledge, 301
- Inverted Picture, Eye, 259
- Involuntary Acts, good and bad, 405
- James, Prof., Immortality, 109, 110
- John, St., differs from Philosophers, 193, 194
- Judgments, 11, 18, 303
- Kinetoscope, 276
- Knowledge, nature of, 37
- Knowledge of God, illustrated, 38
- Law of Non-Contradiction, 383, 426
- Life—is "Being," 352; animal, 359; plant, 354; dormant, 356-359; the great mystery of, 363; manifested life we know, 364
- Light, Color, objective Reality of, 236; sources of, 170; luminosity of the eye, 172
- Localizing of the Sensations, 161
- Male and Female, 69
- Man, the First, 52
- Man, what is he, 144; miracle-worker, 428, 445
- Material Cosmos, 292
- McCosh, 11-17, 77, 160, 250, 291, 292, 313
- Memory, 78, 79, 82, 84, 86-88, 87, 89, 100
- Miracle, defined, 191; Nature not violated, 428
- Miraculous Power, 188, 428, 445
- Morality, animal, 423
- Moral Good in animals, 421; moral argument for God, 417; in character, 404; obligation, 401; necessity of, 423
- Motion, 122, 223-5, 376, 377
- Motion, Visible Force, 373-4
- Motion—visible power, 393
- Natural Realism, 291-3
- Nature not violated, 428
- Necessary Truths, 307-8, 381-382
- Nerve—impulse to the brain, 163-4
- Nerves of special sense, 169
- New Psychology, 94
- New Scientific Theory of Life, 57, 58, 66
- Non-Contradiction, law of, 383
- "No Object without Subject," 331
- Nothing Inert, 395
- Numbers, 383
- Objective Reality of Light and Color, 236
- Obligation, 407; Origin of, 409
- Olfactory Nerves, 177
- Omnipresence of God, 130
- Omnipresence of the Soul, 136, 164
- One, The One who is infinite, 343-4
- Organic Germ, vitality in, 358
- Organs not cognized, 213
- Organs of Perception, 207
- Organ of Sight, 220
- Origin of Man, 57
- Origin of Moral Obligation, ch. 8, sec. 5, 409
- Origin of Spirit, 61
- Origin of Woman, 70
- Our Origin, ch. 2, page 21
- Our Sphere, 20
- Own-Being, 324, 332
- Pantheism, 28
- Parallel Lines, 17, 385
- Partial Knowledge of the Infinite impossible, Why, 344
- Pendulum, 438
- Perception apparent Deceptions, 271
- Perception External, 160, 184
- Perception Internal, 294
- Perception Scientific, 290, 300-1
- Perception of Distance, not acquired, 251
- Perception, Organs of, 207
- Perfumes, 289
- Personal Identity, 76
- Person, 364; identity, 366; real, 327
- Perspective in paintings and in vision, 253, 257
- Phantasie, substantial, 315
- Phenomena, 227; meaning of word, 306; the, of the World Real, 329
- Philosophy and Common Sense blended as One, 293
- hitherto contradictory, 293
- Physiology, 163, 169-179

- Power, 366; a substantial reality, 367; effect essential to, 368; a Reality seen by all, 392; executive, over the body, 370
 Primary Thought of Substance, 320
 Primary Qualities, 202-4
 Primary and Secondary Qualities, 166-7
 Prime Reality, the Spiritual, 296-7
 Prisoner in dark cell, blinded, 270
 Prisoner, solitary, becomes idiotic, 435
 Proof of a Personal God, 22
 Proper-Being, 324-28
 Psalm 139, 75
 Psychology, 94
- Qualities, primary and secondary, 166
- Realism, 40; recent attacks upon, 323
 Realism Natural, 291-3
 Realism is Truth, 324, 334
 Realism and Idealism, contrasted, 333
 Realities, Cognized, 184
 Realities due to secondary causes, 328; due to man, 330
 Realities, spiritual, 294
 Reality, 323-325
 Reality of Efficiency, 389
 Real Substance, 296
 Reid, 160, 291
 Refined World for the Soul, 173
 Reflecting Telescope, 261
 Reflex of Bodily Activities, 148, 165
 Relation between the Spiritual and the Material is that of Mandate and Obedience, 427, 443
 Religion, 104-6, 424
 Religion, scientific view of, 52; our supreme duty, 424
 Religious Theistic argument, 426
 Responsibility, 397-9, 426-8, 452-3, 456, 463, 469, 470
 Retina, 172-3-4; Central Point, 265; change of centre, 269-271
 Retina and Camera, 221, 274
 Revelation, 42
 Revelation and Science, 53
 Reversal of Picture, eye, 262
 Right and Wrong, ch. 8, sec. 5
 Right and Wrong, 401
 Right the Great Reality, 403
- Science and Revelation, 53
 Scientific Perception, 290-300
 Scientific Sight, 285-6
 Scientific Theory of Life, New, 57
- Self-Approbation — reproach, 402, 417
 Self-Consciousness, 294; in animals, 294-5
 Self-Execution, 461
 Sensation, 148; from lost members, 142
 Sensations, Localization of, 161, 164
 Space and Time, 16, 112
 Space, 120; an attribute of material things, 122; Mosaic account of, 124; empty, 122, 127; Real Nature of, 128; a finite reality, 130
 Space, Idea of, from Cognition, 121
 Space and Infinitude, 379; relation to Infinitude, illustrated, 133
 Space and the Soul, 134; omnipresence of Soul in, 136
 Space, necessary thought of, 125
 Stars, 230
 Stewart, Dugald, 77, 160, 291
 St. John, 193; differs from Philosophers, 194
 Soul a Cosmos, 470
 Soul, created, 49; the human soul, 145; a spiritual Cosmos, 145, 427, 470; omnipresence of, 164; soul-thirst for God, 349; void condition of, 146, 301
 Sound, objective reality of, 287
 Source of all knowledge, 301
 Spirit, Holy, impulses due to, 348
 Spiritual Realities, 294
 Spontaneity, 428, 433
 Squinting, 268-9, 270-71
 Sub-Consciousness, 94, 98
 Subjective Sensations, 180
 Substance, 310; Primary Knowledge of, 320; Concept of, 322; Table of Elements of, 322
 Superstition, 9, 302
 Supreme Duty Religion, 424
- Telescope, Reflecting, 261
 Theophanies, 348
 Time Attribute of Concrete Being, 310
 Time and Eternity, 378
 Time and Space, 16
 Time, 112; "No Time," unthinkable, 115; True nature of, 118; not Eternity, 119; Attribute of created Being, 120; Relation to Eternity, illustrated, 131-132
 Touch, 289
 Transmutation of Forces, 439-41
 "True-Being," 324
 "True-Being," 325
 Truth Impregnable, 380

Truth Unassailable, ch. 10, 471-2
Twofold Intuitive Perception, 301

Ultimate Objects and Truths,
318-19

Use and Disuse, Vision, 269-71

Van Norden, 94

Variations, animal—origin of, 63

Vegetable Life, 354

Virtue, 423

Visible Force, Motion, 373-4

Visible Realities, only Color, 229

Vision, Binocular, 263; change by
use and disuse, 269-71; not al-
together single, 267; of relief, 268

Vision of God, 351-2

Vision, Scientific, 286

Vision of the World, 246, 249-50,
253

Visions, 181

Vital Force, three suppositions, 356,
357

Voice of God—Conscience, 402, 417
What are we? 75

Will Power, 189; miraculous, 428

Will, New Exposition of, ch. 9,
427; Preface, 427; acts the result
of combined activities of the Soul
—two Difficulties, 432-436; con-
servation of energy, 427, 441;
cause for everything in the Soul
—definitions, executive-power,
causation, influence, free, free-
agency, responsibility, 458-9;
teaching of Scripture, 469

Will, Executive Power, 427, 458-9

Will, Self-Execution, 461; versus
Self-Determination, 427, 461

Woman, the First, 52; origin of, 70

World, the, an organic unit, 362

Yellow Spot of Retina, 265; change
of, 269-71

Zero of Thought, 342-3



